


The SECRET MESEEM OF MANKIND consists of flve picture-packed volumes (solidly bound together Por convenient reading). Dip into any one of these volumes, and as you turn its pages, you find it difficult to tear yourself away. Hages, you find it difficult to tear yourself away, Here, in story and unTION OF STRANGE AND SIECRET PHOTOGRAPIIS, containing everything from Female Beauty Round the World to the most Mysterious Cults and Customs. These hundreds and hundreds of large pages will give you days and nights of thrilling instruction.

## Contents of 5-Volume Set

Volume 1-The Secret Album of Africa
Volume 2-The Secret Album of Europe
Volume 3-The Secret Album of Asia
Volume 4-The Secret Album of America
Volume 5-The Secret Album of Oceania


## MAKE GOOD MONEY



## ThAIN AT HONE quickiy In youi

RATIONAL DEFENSE has created thousands of new Jofs in Radio. At the same time mariy men have been called away from good-pay radid jobs. fratned techniclans! No matiter what kind of woris sou may be dolng, no matter where you jive. jou can how train yourself at home outckiy, in Hadio spare tiaio dor a profitable carces Th Hadio. complets in bools form will teain youresing course SOLUNES Ghirardi's RADIO PATSICS COURSE covers lit. erally every branch of modern Radio. It's really one big hands, inexpensive volume. It complains the material equiralent to that offered in courses priced up to $\$ 100.00$. In no other way could you possibly master the basic fundamentals of Electricity, Sound, Radio and Telerision so easily, simply and interestingly, Everything is explained Here are nearly 1000 nllustrated pages packed with practical information. No wonder thousands of euccessful men . now making good money In Ymportant Radio jobs, turned to tisis hores otudy course for their training.


EXTRA PAY IN
ARMY, NAVY, TOO. Are you likely to bo called into service Are sou now in military the coupon below smmediately! Learning you should maid helps men get extrs rank, extra Layn, more in-

Ghirardi-Who $\mathrm{He} / \mathrm{s}$ Alfred A. Ghirardi, author of RADIO AIred A. Ghirardi, author of RADIO one ma's quatified-and sufficiently capable-to write such a practical self-instruction home-training cousse in Kadio. Kis knack for making even CLEAR TO THE BEGANN゙EIS has won hm praise the world over, and is the result of a backrround given 10 few men. He organized what was peshaps the first laboratory and lecture conise in radio fundamentals and service work, He has personally taught radio for nearly ten years in cre has contributed outstanding material to simos every radio magazine and has acted as technical consultant to many of tho leading radio manufar turers. this unusually broad experience and profound knowledse of radto are reflected on evers
fact-crammed pary of the authoritative, up-to-dui RADIO PIIFSICS COTBSV-nOW trade avatabl to you personally ts SELF-INSTBLCTIUN Hoqh sis your home.


Yes Complefe, Simple, Proctical Course fer seffinstuction-ell in One Big Volume RADIO, SOUND, TELEVISION, MADE EASY AS A-B-C

No previous radio or electricat or mathematical knowleige needed. This ccurse starts right at the beginning and leads sou first into a thorough understanding of when scu're sound and Electrical principles. Then, author explains ererything ahatit radio sted-by-step from the basic fundamentals right through Telerision. the essential foundation knowledige required to prepare you for any kind of radio work ... in Radio Manufacturing. Arlation, Marins. Police, or Jrilitary Radio Broadcasting - Seritcing . . Electronics enabio Public to checks. 856 self-examinstion questions enable prepare thotrself for wolk as radio station eper-ator-radio operator aboard shlp-servicing receiversinstalling public address equipment-installing and repairing auto sets-werk on television and EDL. Iou
teach jourself-in no timel

HERE'S A PARTIAI LIST OF CONTENTS
Radio Broadeasting...Sound, Speech and Nusic fos Droadcasting...Electrical Vits and Calculations... Electrical Circuits...Batteries .... Magnetism ... Elec. nating Current Circuits...Eilectric Filters..Electrical Measuring Instruments... Radio Wares...Radio Transmission...Broadeazing Stations... Recelving Stations Mifleation...Stuperheterodyne Recelvers... Design of Kadio Frequency Amplifiers and Tuning Coils...Audio Amplification...Loud Speakers...Automobue and Air* craft Receivers... Phonograph Pickups gind Sound $\Delta m$ plifter 8 ystems... Short Ware Reception...Photoelecand Servicing. Sound Motion pictures. Rememter! This is only artial list of Remamber! This is onfy a partial list of the subjects
covered, indicating the tremendous scope of this coursel


972 Pages, 508 Illustrations. Fo get this $\$ 100$ value simply fill in and mail coupon today. $\$ 5$ complete - pay only $\$ 1$ now, $\$ 1$ a month



## combined with SCIENCE FICTION

Volume Two - Number Four

# ALL STORIES NEW AND COMPLETE 

## FEATURE NOVEL

THE CORE S. D. Gottesman ..... 10Vast beyend concept was the dead centre of the cosmos which they sought. A novelyou will long remamber.
3 TOP-NOTCH NOVELETS
TWO-WAY TIME Albert A. Gilmour ..... 46
Their excursion to seek the cause of the message turned out to be more fantastic than they had fancied. And they had fancied plenty!
FOUR-STAR PLANET Richard Wilson ..... 66
It was to be a four-star picture, the producer fondly dreamed - only ha didn't dreamenough!
PASSAGE TO SHARANEE Carol Grey38A strange, enthralling tale of the stranger who wanted passage on the Mars-ship.
6 UNUSUAL SHORT STORIES
MYE DAY Martin Pearson ..... 30
Ajax Calkins gets his throne at last - only it isn't exacily what he wanted; there WEREdrawbacks!
THE REBEL SLUG Basil Wells ..... 35
The creature wanted desperately to be human
FILE 384 Bowen Conway ..... 39
Out of the red disc cama the invaders - only there seemed to be some doubt as towhat they were actually invading!
OLD MAN MARS R. R. Winterbotham ..... 59Meet the grand-daddy of all sentiont life - at least, that's HIS contention!GALACTIC GEAR . . . . . . . . . . . . . . . . . . . . . . . . . . Chester B. Conant77
He was a mild little man, and this new high gear exhilarated him. An off-trail story. WEB OF MOONS .......................................... Hannes Bok ..... 86The author of "The Alien Vibration" paints another engrossing word-picture.
SPECIAL FEATURES
FUTURIAN THMES The Editor ..... 34
STATIORA X Everyone ..... 102

[^0]
## PRICE SMASHING SALE!



Truly an outstanding offer! Only an I sell these reconditioned Underwoods at the sensationally low price of $\$ 39.85$ cash, or for only ac a week on my easy term price. Each one carefully refinished so it three tinies as much. Tie mifs. orig. selling price on this Underwood was $\$ 125.00$. It's sent to you n Underwood packing box with Tnderwood book of instructions on care and operation.

## A NOISELESS MACHINE

Latest achievement in typewriters? Provides writing perfection with SILENCE. For those who want the advantages of a quiet home or office. This Underwood eliminates the nerve shattering clatter common to many models. An aid to better work because it allows clear thinking. reduces fatigue, irnproves accuracy. This typewriter disturbs no one, for it is almost impossible to hear it operate a few feet awav. You get all the features on an Underwood PLUS Noiseless typing.


## FIRST CHOICE of TYPISTS

Over 5,000,000 Underweods now in use! Recognized as the finest. strongest built! Here is an office size Underwond with late modern features that give you SILENT TYPING. Has all standard oquipment-keyboard. 2 colors, back spacer, avtomatic reverse tabulator, etc. There is no risk! Seo before you buy on my 10 Day No Obligation Trial Plan. Beturn machine if not satisfied.

## WIDE 14" CARRIAGES

Wide carriage machines for government reports, large office forms, billing. etc.. only $\$ 3.00$ extra with order. Takes paper 14"' wide, has $12^{\prime \prime}$ Writing line. A Real Buy in a reconditioned Underueod Noisless! (See coupon).

## FREE!

## TOUCH TYPING COURSE

Complete Van Sant home study course free with Underwood. It's carefully illustrated, written exdressis for bome use

[^1]International Typewriter Exchange 231 W. Monroe St. Dept. 456, Chicago, 11 .

Completely Reconditioned and Fully Guaranteed HO MOHEY DOWH

## 10 DAY TRIAL

Easy Terms-19c a Day

No obligation to buy. See machine on wide open 10 day trial. Pay me no money until you test, inspect, Noiseless Sou judge for rourself Noiseless. $o n$ nudge for rourself. is the higgest typewriter bargain you have ever geen then say. "I'll buy." Send only roce a week or $\$ 3.00$ month until term price of only $\$ 43.85$ is paid. There is no red tape or investigation-Mr offer is er artly as I state it.

## 2-YEAR GUARANTEE

I back this machine with my personal $2-\mathrm{yr}$. guarantee that it is in A-1 condition and will give first class service. Over 30 years of Fair Dealing backs this guarantee


YOUR WHOLE HOUSE WILL BE WARMER, COZier, more healthful with the New Duo-Therm Fuel-Oil Heater with patented POWER-AIR-the most amazing, newstyle heater ever made! Duo-Therm's new Power-Ais blower warms your whole house fast; gives you comfortable, even warmth, floors to ceilings! And Power-Air is adjustable, to give you just the amount of circulation desired. (Remember: heat that is not power-driven
floats lazily to the ceiling. But Duo-Therm's patented Power-Air drives lazy ceiling heat down, keeping floors toasty-warm! Comfortable!) Duo-Therm with Power-Air saves up to $25 \%$ on fuel oil over a heater without Power-Air. Duo-Therm will open your eyes to a new standard of clean, cheap heating comfort . . . comfort that no other heater can give youl See the new ROYAL model below...

## 

An Amazing New Heater, really two heaters in one! First: it circulates forced warmth to the whole house fast, with Duo-Therm's efficient POWER-AIR! Second: with Radiant Doors open, it radiates warmth like a fireplace! As sturdy as a furnace . . .


DUO-THERM...THE MOST POPULAR FUELOLL HEATER IN AMERICAI
as beautiful as any piece of modern furniture!
New Standard of Beauty! New, modern styling-new rounded contours -new Duo-Tone finish-make the Duo-Therm Royal a lovely addition to any room 1 The handsomest heater ever madel
New Standard of Eminciency! Now, more than ever before, fuel-oil conservation is important! And DuoTherm's new, improved patented Dual-Chamber Burner, with complete flame control, saves oil . . . gives you more heat from every single drop! And only Duo-Therm has it!
Ertra Features! Handy Front Dial gives just the degree of heat you want. Duo-Therm's Radiant Doors open to give floods of "fireplace" warmth! Special Waste-Stopper saves fuel. Coordinated Control insures proper draft for perfect combustion. Safe! Duo-Therms are listed as standard by the Underwriters' Laboratories.
Small Down Payments! Duo-Therm afers a complete line of heaters, all
styles, all sizes, 1 to 6 rooms. Easy terms. See new models at your dealer's today! Mail the coupon now for coms: plete information!


## RADIANT-CIRCULATOR ONLY \$3995

Model 575-2 Duo-Therm is the Model $575-2$ Duo-Therm is the
Derfect answer for room heating cornfort. Radiates and circulates.

Copr. 1941. Motor Wheol CorD.
TEAR OUT AND MAIL-TODAYI-
Duo-Therm Division, Dept. DA-5A Motor Wheel Corporation Lansing, Michigan
Send me, without obligation, come plete information about Duo-Therm heaters. I am also interested in Duo-Therm Furnaces $\square . .$. Wator Heaters [... Trailer Heaters $\square$ Ranges $\square$



# Men, Women! Old at 40, 50, 60! Get Pep <br> \section*{Feel Years Younger, Full of Vim} 

 Don't blame exhausted, worn-out, run-down feeling on your age.Thousands amazed at what a little pepping up with ostrex will do. Contains general tonics often needed after 40 -by bodies lacking iron. calcium phosphate, Vitamin BI. A 73-year-old doctor writes: "I took it myself. Results were fine." Special introductory size Ostrex Tonic Tablets costs only 35c. Stop feeling pepless, old. Start feeling peppier and younger, this very day. For sale at all
good drug stores everywhere.

## Amazing New Low Cost SIGKNESS ano ACSDENT IUSURES YOUR WHOLE FAMILY <br> ONLY \$1 FOR ALL Now, we offer for your whole family, <br>  this amazing, new "United" Family

Group Sickness and Accident Policy. You may include each and every member of your family in one application-mother, father, children, and even grandparents for only $\$ 1.00$ a month for
all. Don't wait-send coupon today. No Medical Examination. 3 B $\rightarrow$ ACCUMULATED CASH for Stated Accidental Death
This wonderful, new kind of Insurance Policy pars cash benefits for any accidental death to any member of the family. it pays ACCIDFN'T- $\$ 25.00$ weekly indemnity for EMERGENCT allowance many other liberal features-all as provided for in this remarkable policy.
SEND NO MONEYBREEINSPECTION OFFER
William Lindbloom and family of Chicago, Ill.. above, are all protected by their one "United" Policy. The United Insurance Co. is a dependable Company having $\$ 225,000.00$ on deposit money-just mail coupon for free inspection-no obligation.

## MAIL THIS COUPON TODAY

## UNITED INSURANCE CO

NO AGENT
Elgin Tower, Suite G-76-G, Eigin, Ilf. NILLCALL
Please mail me at once complete information and Free
Inspection Offer of the "United" Family Group Sickness and Accident Policy. Send No Money.

Name
Address


Mail your name and address to HOME SERV̄ICEE SPECTACLE COMPANY, and IOU WILL RECEIVE WITHOUT OBLIGATION Circulars showing latest style spectacles at lowest prices FREE.
Or send 25 c and we will mail to you a set of lenses to assist you in the selection of glasses. NOTHING MORE TO PAY UNTIL YOE ARE FLLLY SATIS-
FIED.
We handle only HIGH Grade lenses. Our Doctor, with many years of experience, GEARANTEES $100 \%$ SATISFACTION OR NO COST TO YOU.
WE DUPLICATE AND REPAIR BROKEN SPECTACLES at great savings.
HOME SERVICE SPECTACLE CO., Dept. P-30 1011 Chestnut St., Philadelphia, Pa.

## Will You Let Me PROVE I Can Make YOU a New Man?

LET ME START SHOWING RESULTS FOR YOU


COULD fill this whole magazine with enthusiastic reports from OTHERS. But what you want to know is - "What can Atlas do for ME?"

## ONLY 15

## MINUTES A DAY!

That's all I ask! Just give mé 15 minutes of your time daily - and even in that short time I'll start giving RESULTS. RESULTS that 5ou (and anyone else) can SEE, FEEL MEASURE with a tape!

## FREE BOOK

"Dynamic Tension" has done so much for me and other fellows that much simply ask you to gice it a trial. I simply ask you to give it a trial. new man of YOr, that it can start new inches of power puching out your chest build up your shoulders new. hard. firm nutuscles on your biceps, make those stomach new. hard, fours hard ridges! your bicess, make those stomsch Why not risk a pestage stamp? Send roupon for my 48-page illustrated FREF BOOK AT ONCE! Address me personally: Charles Atlaz, Dept. 4S, 115 East 23rd Street, New York, N. Y.

## CHARLES ATLAS, Dept. 45

115 East 23rd Street, New York, N. Y.
I want the proof that "DYNAMIC TENSION" will help make a new man of ne-gise me a healthy, litasky body and big mascle
development.
Send me development. Send me your free book, "Everlasting Health and Strength.'

Name
(Please print or write Dlainly)
Address
city ........................................ stato .... ..........

J. E. SMITH President
National Radio Institute
Established 25 Years

I WILLSEN A SAMPL AMPLE
to PROVE I can Train You
Home in Spare Time for at


7 Trained These Men


Chief 0 perator Broadeastin! Station
'Before I completed your L8Bsons. 1 obtaibed my Fa . dio Breadeast Operator's license and immediately joined Station WMPC where I am now Chief Operator." HOLLIS F. HAYES. 32 T Madizon st., Lapeer, Michigan.

## Makes $\$ 50$ <br> - Waek <br> -I am making around 850 a beek after all -IDenses a I $\theta$ pald, and ©m getting all tho work I can take care of, whanks to N. R.I." H. W. SPANGIER, $126^{1 / 2}$ S. Gay St., Knorrilie, Tenn.

 $\$ 5$ to $\$ 10$ Spare Time I am engaged in spare timo Radio work. I average from $\$ 5$ to $\$ 10$ a week. I often wished that I had enrolled sooner because all this extra money sure does come in handz.' THEODORE K. DUBREE, Horsham, Penn.

## 9 <br> Extra Pay in Army, Navy. Too

Erery man likely to go into military service, every soldier, sailor. marine, should mail the Coupon Now! Learning Radio helps men get extra rank, extra prestige, more interesting duty at pay up to 6 times a private's base pay. Also prepares for good Radio jobs after service ends. IT'S SMAART TO TRAIN FOR RADIO NOW:

Here is a quick way to better pay. Radio offers you the opportunity to make $\$ 5 . \$ 10$ a week extra in spare time a few months from now and to prepare for good full-time Radio jobs paying up to ${ }^{250}$ a week, MAIL COUPON. Get my Sample Leason FREE. Exaroine it, read it--see how easy it is to understand. See howt I train you at home in spare time to be a Badio Operator or Radio Technician.

REAL OPPORTUNITIES FOR BEGINNERS TO LEARN THEN EARN UP TO $\$ 50$ A WEEK Broadcasting stations (882 in the U. S.) employ thousands of Radio Technicians with average Day among the country's best paid industriea. Repairing, servicing. selling home and auto Radio receivers (there are $50,000,000$ in use) gires good johs to thousanis. Many other Fadito Technicians take adrantage of the oppertunities to hape tbeir own service or retail Radio businesses. Think of the many good-pay jobs in connection with Aviation. Commerclal. Police Radio and Public Addrezs Systeras. N. R. I. gives pou the roquired knowledge of Radio for thase jobs. N. R. I. traing you to be ready when Television open3 new jobs. Te3, Radio Technicians make good money because thes use their hosds as well as their handa, Thes must be traiced. Matl the COUPON, NOW!
I'LL SHOW YOU HOW TO MAKE 95 , \$10 A WEEK EXTRA IN SPARE TIME WHILE LEARNING Nearly every neighborhood offerz oppartubities for a part time Radio Techalcian to make good money firing Radio sets. I give you special training to show you how to start cash ng in on these opportunities early. You get Radio parts and instructions for building test equipment. for conducting experiments that give you valuable, practical experience. You also get a modern Professional Radio Serricing Instrument. My fifty-fifty method-half working ith Radio parts, half studying my Lesson Texts-makes learaing Radio at home interesting, fascinating, practical.

FIND OUT HOW I TRAIN YOU AT HOME FOR GOOD PAY IN RADIO MAIL THE COUPON. Yll send you a Sample Lesson and my 64-page book FREE. Learn about my Course; the types of jobs in different branches of Radio. Read letters from more than 100 men I have trained so you can 900 what they are doing, oarning. MAIL THE COUPON in $2 n$ enrolope or paute it on 2 Denny postal.

> D. E. Smith, President Dept. ${ }^{\text {JDA } 2 \text { National Radio }}$ Institute Washington, D. C.

## This FrIE Boor has Helped Hundreds of Men to Make More Money

## Mr. J. E. SMITH, President, Dept, RDA2

NATIONAL RADIO INSTHTUTE, Washington, D. O.
Mail me FREE, without obligation, your Sample Lesson and 64-Dage book "Rich Rewards in Radio." (No Salesman will call. Please write plainly.)

Name $\qquad$
Address
BROADCASTING STATIONS (top illustration) empley Radio Techuicians as oboratores installation, maintenance men and in otber fascinating. steads, well-paying technical jobs. FIXINE RADIO SETS (lower illustration) DaFs many Radio Technicians \$30, \$40. \$50 a weos. Others hold their regular jobs and make $\$ 5$ to \$10 a weet oxtra in spare time.

## Mail Coupol





## THE CORE

Vistas unthinkable-speed beyond all imagining-Sphere Nine bears its complement of a new type of being, Homo Superior, to the dead center of eternity-the core! An unforgettable novelet by the author of "Sir Mallory's Magnitude" and "Fire Power."

## by S. D. GOTTESMAN

## CHAPTER I

$\sum$ISTAS unthinkable-speed beyond all imagining-Sphere Nine followed its course.
Unrelieved blackness alternated dazzling star-clusters; from rim to rim of the uni-
verse stretched the thin line that marked the hero's way.

Heroism died, they say, when the "superiors" opened up the last few stubborn cubic centimeters of brain cells; it died when the last of the "ordinaries" died with a curse on his lips. Well, so perhaps it
"And you said they had no sense of humor," remarked the second of the visitors.

was. But this is a story of the days when superiors were new and a little odd, when they were the exception to homo sapiens.
On Sphere Nine there were four superiors and a dozen ordinaries. Will Archer, executive officer, was a superior of the third generation, big-browed, golden-eyed. Mamie Tung was an experiment, the psychologist, court of last appeal in all emotional disputes. From what records we have it appears that Mamie Tung was of average height, slender to emaciation.
Star Macduff, the calculating officer, had three strong superior strains and as many of ordinary. But it was necessary that he be of the complement, for there wasn't another man in the solar system who could touch him for math. Yancey Mears, white female superior, was the clericalist and tabulator, serving as many as needed her,
at the same time doing her own work of photographing and mapping the unfamiliar stars.

The ordinaries surrendered their names on entering Sphere Nine; they were known as Ratings One-Twelve.

VERY gravely Will Archer cocked his cap and leaned back.
"Rating Seven, what have you to say for yourself ?"

The knotty-muscled man wrung his hands nervously, stammered something unintelligible.

Archer blinked for Mamie Tung.
The golden-skinned woman slipped through the pipe, sized up the situation in one practiced glance.
"What's your number, handsome?"
That was the way the psychologist

Illustration by Lin Streeter.

worked; fattery, humor, and an easy job of fact-finding at first. And the man would gain confidence from the very sound of his number as she spoke it. You can't find anything out from a man paralyzed with terror.
"Seven, madame."
"Quite a builder, aren't you, Seven?"
"I'm sorry, madame-I didn't mean to let them loose-"
"How many are there?"
"Ten. We used to watch them fight-"
A little metallic streak scrambled across the floor. Will Archer, in less than a split second, had hurled a filing-case at it. It buzzed, sparked and was still.

It was indeed a greatly improved specimen of a tinc, the strange, actually living mechanisms which had been developed back on Earth for amusements. The Terrestrial tincs had something less than the intelligence of a dog, but could be trained for combat with fellow machines. Tincfights were all the rage.

But what Rating Seven had done, Archer realized at once, had been to raise both the intelligence and the capacity of the tinc to a point where it could easily become a first class menace. These mechanisms were independent, inventive, and capable of reproduction; all ten must be found and destroyed at once.

Mamie Tung picked it up with a pair of insulated pliers.
"Very good workmanship. Admirable. But now that they're scattered all over the ship what are you going to do about it?"
Ratting Seven cleared his throat noisily.
"They only have two directives, madame. One's interspecific fighting and the other's avoiding cold. I was thinking that maybe I could make a kind of bigger one to hunt them down-"
"No," said Will Archer conclusively. "You're pretty good, but I wouldn't trust you not to make something that chewed up relays or Bohlmann metal. You may go."

Mamie Tung flopped on a couch.
"Glory! The things we have to do!"
"Don't get any qualms now. I'll make some kind of magnet that'll draw their visual elements. Then we can bat them to pieces. Blink Star, will you?"

Mamie Tung extended a golden arm to signal the calculator in his quarters. She wrinkled her pugged nose curiously:
"Just how good is that Rating Seven?"
"Very good indeed," said Will Archer, turning the little machine over in his hands. "Fine workmanship. He knew when to stop, too. Could've stuck ears on it, given it lights-too bad."
"Seven goes?"
"I'll dispose of him in a few weeks. Make it look like an accident."

The Calculator slid through the tube, made a mock salute. He was surprisingly young.
"Welcome, Star. Give me all relevant math for this tinc."
"Very neat....haven't seen one on the ship yet. They must be fast."

Mamie Tung yawned a little.
"Will's going to liquidate Rating Seven."
"Is that so? Necessarily, I suppose?"
The psychologist smiled quietly and shrugged.
"Aren't you going to give him any leeway, Archer?"
"I'd rather not. It won't endanger the ship to lose him; keeping him on might. He's maladjusted - that's very plain. This business with the tincs-he's too bright. If you wish I'll hold a vote."

The Calculator nodded. Mamie Tung blinked for Yancey Mears.
"Report on Rating Seven, Mamie."
Rolling back her eyes a little, the Psychologist announced in a monotone:
"Physical condition, adequate. Emotional adjustment, seemingly imperfect. Submitted to glandular atonic treatment on the 23rd inst, -submitted to repeated treatment on the 87 th inst. Reading shows little difference in emotional level. Attitude; morose and incompatible. Occasionally aggressive. Alternate periods of subnormal servility and abnormal independence. Corresponds to a certain preliminary stage of a type of manic-depressive. Psychologist recommends liquidation, as treatment would substitute an equally dangerous attitude of frustrated egotism.'
"But can't you reason with him?" burst out Star Macduff.
"Stick to your math," said Yancey Mears as she entered. "I greet you, vanguard of mankind. Kill the midwit, I say.'
"I agree with the Psychologist and the Clericalist," said Will Archer, clearing his throat. "Star?"
"I don't know. Perhaps-Madame Tung, do you think it would help if I spoke to him?"
"No, Star-I don't. The impact of your
two personalities would be mutually exclusive. That's something you can understand, seeing as its math."
"I don't understand it yet, madame. Archer, does that man have to die?'

Will Archer nodded to Yancey Mears.
"Naturally, Star. We wouldn't argue with you if you told us that you'd reached a certain resultant. As for the emotional side-well, we allow for the fact that you're half human-" She stopped, her face red.
"Bad slip, Yancey," volunteered Mamie Tung. "Maybe you'd better have an atonic. I can operate on a femina superior as easily as a homo sap."

$\mathbf{N}^{T}$TAR MACDUFF had covered his face with both hands. He dropped them to stare desperately at the Clericalist, his eyes bewildered. Yancey Mears met his gaze levelly, said simply:
"I'm sorry, Star."
The Computator's shoulders quivered a little as he turned to the golden-skinned woman.
"Madame Tung, maybe $I$ 'd better have an atonic. Perhaps if my glands weren't -acting up-1 wouldn't forget every now and then that I'm one of the lower animals."
"No," said the Psychologist. "You're too important. I have no data available; I don't know whether glandular activity correlates with math-mindedness."
"Nevertheless," said Will Archer, "I order it."
"Thank you, Archer," said Star Macduff. He stepped through the tube; the Psychologist followed him, a supple flash of golden skin.
"That was kind of you, Will," said Yancey Mears. "Maybe it wasn't very bright." She leaned back and shut her eyes.
"You're using unreal figures, Yancey. The bearing of all this is solely on whether we return to Earth or not. I, for one, don't much care whether we arrive personally or not. As long as the records of observations get into the proper hands. It's such a terribly ticklish thing to be doing....lapsing one moment and letting emotion override judgment may tip the balance against a satisfactory solution to our personal equation. The moment our path ceases to be part of a perfect circle we, to all real purposes, cease to exist."
"Is it so very important-this being the ninth sphere they've sent out?"
"It has legitimate bearing on improvement of the species. The cosmic rays, wherever they come from, upset our genetic plans; we can achieve success only in a certain small percentage of cases. Weyou and I, personally-are examples of that small percentage. It is logic-common sense-what you will-to block off the cosmic rays before going any further in genetic work.
"And, before we know what to do to block them we must find out what they are. And before that we must find out where they come from. That is what we, personally, are engaged in doing."
"Sounds big."
"Is big," said Will Archer somberly. "Why didn't you want that glandular atonic?"
"Because I can control myself-I hope."
"With respect to me?"
"Yes. Now, don't go getting male. I'm going to wait till I see what happens to our Calculator first. If he quiets down sufficiently I'll notify you. However, I won't tisk any emotional upset if he doesn't."
"And of course," said Will Archer, tipping his cap over his eyes, "it might even be necessary to be unusually kind to him...."
"How unusually do you mean?"
Silence.
"No, Will. After all, he has three h. s. strains!"'
"Not even if I order it?"
Yancey Mears took hold of a wall loop and pulled herself to her feet. "I'll blink Mamie Tung tomorrow and tell her I'm ready for an atonic. That's what you want, isn't it?"
"That," said Will Archer slowly, "is the very last thing I want."

THE Calculator slipped through the tube, checked neatly as he saw the two move slowly towards each other. Not by the blink of an eye did they betray that they were aware of his presence. Star Macduff did not move, stood flat-footed and mute, one hand reaching for something, he had forgotten what.

For a long moment in that ship there was no time. The forward slice, where batteries and files of business machinery clucked quietly away, doing duty for any-
one who would feed them figures; the midships slice where living quarters and offices were for superiors and ratings; the aft slice, greater than both the others combined, where electronic tension was built on ponderous discharge points and went cracking out into space at the rate of one bolt in every five-thousandth of a second; even out beyond the ship, even to the end of the shimmering, evanescent trail of electrons that it left as a wake, there was no time while those three stood in Executive Officer Will Archer's office, two loving and one in hate unspeakable.

Mamie Tung stepped through the tube, took Star Macduff by the arm after sizing up the situation in one swift glance. "Did you ask Will to enter the time of the operation?" she said.

Will Archer and Yancey Mears snapped back to reality in a split-second. "Speak up, Mamie," he said. "Yancey and I are going to enter permanent union."
"I advise against it," said the goldenskinned woman. "It will complicate our living arfangements." She rolled back her eyes, breathing, deeply, made as though to speak, but said nothing more.
"Congratulations," said Star Macduff. "I'll plot a joint life probability line for you two."
"You needn't bother."
"It will be a pleasure, Archer." The Computator left them standing silently, a little embarrassed.
"Again I advise against it, Will and Yancey. What reasons have you for permanent union at this time?"
The Clericalist smiled a little bitterly.
"The same reason you have against it, madame-love."
"No!" The golden-skinned woman recoiled. "I haven't done that-my judg. ment is still sound!"
"Prove that by leaving us alone, madame."

The Psychologist clutched at the rim of the tube as though she were fighting a gravity that tried to drag her through. Intensely, pleadingly, she said: "That's not true. You know nothing of such thingsyou haven't specialized. I have nothing against permanent union, but on the ship it would be suicidal-time lost and relationships unbearably complicated-think again before you do this!"
"You were asked to leave for personal reasons," stated Will Archer. "You have
seen that two mature minds are in agreement on this matter. Yet you did not obey this request, nor did you respect our decision. Your behavior is irrational and antisocial. Mamie, I never thought that you were our weakest link."

There was fear in his eyes as she silently departed, looking somehow crushed and shrunken.
"I was afraid of this," he said. "The most delicately balanced organism is neither flesh, fish, fowl nor good red machinery. It's the social organism, whether the world of man or our little blob of metal, out here in the middle of a vacuum. Will you take a reading of the counters, please?"

YANCEY MEARS extruded the sensitive plates from the hull and checked off the slowly revolving dials as they responded to the cosmic rays impinging on the plates.
"Intensity's about twenty times the last reading."
"We're there."
"What ?" she asked incredulously.
"We're there. At least, there's only a significant distance separating the ship and the source of cosmic rays. Bring in some of the 'photo-plates."

The Clericalist operated the fishing-rod arrangement that reached the cameras with which the hull was studded. For not since the voyage's beginning had any of them seen outside the ship.

The Executive slipped the transparencies against a lighted screen. "Shows nothing," he said.
"What did you expect to find?"
"I didn't expect anything in particular. But I believed I was correct in anticipating a visible object. It seems I was not. We'll change course as soon as we've disposed of the other two superiors."
"What plans have you made?"
"All plans up to the point of segregation. It was plain that a situation like this-one or more members of the complement losing their grasp on our social fabric-might occur. Sphere Nine is designed to accommodate them."

Quietly he flicked a pair of inconspicuous studs under his work table.
"Madame Tung and Mr. Macduff, please report to the Executive Officer in room C7." He broke the connection.
"Where's that?"
"Off the port side of the midship slice.

As soon as both are in it seals itself. Now perhaps we can get to work...."

## CHAPTER II

STAR MACDUFF and Madame Mamie Tung were sealed in on schedule.
The Calculator, eyes glittering, drew a rod with a pistol grip.
"Where'd that Fome from, Star?"
"Made it myselt. In my spare time."
"You never had any spare time. Time spent on work not requisite to the sphere's needs is wasted time. I think you've made a fool of yourself. When Will comes I hope you remember your manners."
"Will isn't going to come, madame. We've been locked in here. I don't know whether he intends to starve us to death or whether the room will be flooded with gas...."
"Nonsense."
There was a creaking, scraping noise; the walls of the room seemed to twist on their weldings.
"What was that?"
"I wouldn't know, madame. You forget that I'm half human. It was, no doubt, the brainwave of a homo superior."
"Ai-Ai-Ai-i-i-"
The two human beings whirled back to back, wild-eyed. In a tense whisper, her gaze not lowering from the walls, the woman asked: "What was it, Star?"

The hysteria was gone from Star Macduff's face; in a cold, determined fury of concentration he wrinkled his brow, running down possibilities-considering the chances of colliding with a star or planet, the chances of a fault in the ship's structure, sabotage by one of the ratings, sudden lunacy of the E. O., the chance that he himself was mad and undergoing hallucinatory experience-with all the power of his brain.
His was a brain of no mean power, you .will recall. In lightning order he assembled probabilities, some two hundred of them, ran through them each in a second's time, dismissing them one after another as they were contradicied by facts in his possession. It could not be a planet that they were near, for the instruments showed no planes within light-years. The instruments could not be faulty, for he had checked them personally yesterday.

His clear, white light of concentration
viewed each possibility in turn, and each was dismissed.
"Madame," he said softly, "I know of no explanation for what has happened."
"Ai-i-i-i-i-i-"
The grotesque creaking sounded again. Star Macduff, feeling curiously weak, fell to the floor.
"Easy, Star! What's the matter with you?"
"Feel like jelly....shouldn't-perfect health...."

The woman took the chance to relieve him of the weapon he had made. "What does it do?" she asked.
"Metal-fatigue .. crystallizes cross-fiber stead of lengthwise."
"Ai-i-i-"
Madame Tung felt herself sinking, raised the gun and fired at the lock. The door smoothly swung open into the communication tube that ran the length of the ship.
"Come!" she lugged Star Macduff with her, pushing him ahead through the tube, to the Executive's Office.
"Sorry to interrupt. This must blow your plans up into the air, I know. But this man's sick and I don't feel-verywell...."

Her iron will gave way and she collapsed at the feet of the Executive and Yancey Mears.

66 HATEVER it is, it hasn't hit us yet. Check with the ratings, Yancey."
"E. O.'s office-count off, somebody, and report."
"All present and in good order, Officer.
What's that noise we heard?"
"Experiments. Cut!"
"Cut, Officer."
"They heard it too, Will. What is it?"
"Star-couldn't explain mathematically .... doubt if you can."
"Thanks, Mamie."
"Ai-i-lul-lul-lul--lull-"
The Computator and the Psychologist rose, looking startled.
"How do you feel?"
"All right. It passed like a shadow. Now let's get down to work. What's the noise? is the problem immediately.'
"Mamie said you couldn't crack it. If you can't by using logic I doubt that anybody can. How about opening the direct window?"
"Use all precautions and checks if you do. I say yes."
"You women?"
They nodded silently; Will Archer set into operation the motors that would unlock a segment of the hull and peel it aside like an orange.

Noiselessly the bolts slipped; into the brilliantly lighted office there seemed to steal the gloom of blackest space as a section of the wall apparently slid aside and opened into the vacuum. There was the merest hint of reflection from the synthetic transparent which masked them from space and that was due to the lightly tinted shields in operation.
"Look at this index jump," said Mamie Tung, pointing at an instrument board with a sharp finger. "It's sky-high when you take the hull off. Metal's stopping the cosmic rays."
"It shouldn't," observed the Executive Officer.
"Let the logician in," said Star Macduff studying the dial. "If we're near the source of the rays, it well might. Metal has failed in the past to stop diffused cosmic rays, the things that reach Earth after plowing through trillions of cubic miles of dust, free electrons, air and what have you. If we're encountering them direct from the source, unaltered by reflection, diffraction or diffusion, their properties may be entirely altered."
"Very good, Star. The question is still unanswered as to what the cosmic rays are. We have not yet seen the source of which we're speaking. Madame, ask the ratings to revolve the ship about its axis. We need a clean sweep of the heavens. Keep -them on the wire."
"Ai lull-lull-luh-"
"E. O.'s office. Rating Five, revolve the Sphere on its axis at low speed."
"All right, Officer."
Will Archer reclined in an angled seat commanding the direct window; he extinguished the lights of the office with a flick.
"Commence the rotation."
"Commence, Rating Five."
"Yes, Officer."
The starless heaven wheeled and spun above him as the E. O. stared through the invisible synthetic.
"Stop!"
"Yes, Officer!"
"Back three degrees."
"Back three degrees, Officer."

The sphere wheeled slowly, cautiously. "See it?" demanded Will Archer.
The others stared into the blackness.
"I believe I do," finally said Yancey Mears. "A sort of luminescence?"
"That's right. Like stars beginning to come out as a fog lifts. Anybody else see it?"
"I. It's changing shape-see the upper left there?"
"Portside of the universe, beyond any Earthly telescope. They could just barely see us from Andromeda with a thousandincher. I'd say we're about on the edge of the cosmos. I'd give you the figures, only they wouldn't mean anything to you."
"Ai-luh-"
"Now explain that one, Star."
66 NHE appearances are: we are approaching a body which is like no known star, nebula, planet, dust-tract or gas-cloud. It seems, furthermore, to be the source of cosmic rays. As our nearness to this body became significant, stresses have been appearing in the ship which make very alarming noises. Two of the complement passed out temporarily for no known reason and with no after-effects yet noticeable."
"Fine. Take the specific gravity of that thing now."

Star Macduff stared curiously, shrugged, and ran the observations off. Silently he handed over the tape.
"Protoplasm," said the executive officer.
"It could be. Then the cosmic rays are-"
"Mitogenic."
The ship trembled again; the Psychol. ogist stared in horror at Will Archer. "What's happening to us?" she cried.
"I don't know. We're working out the problem assigned, however. I assume that you and Star succumbed to the mitogenic rays temporarily, the way yeast-buds die under a concentrated stare from a human being. Since you're both tougher than yeastbuds you recovered. I don't know what kept Yancey and me from going under."
"Consider, Will," said Star Macduff agitatedly. "Think of what you're doing. This ship's going right into the eye of a monster piece of protoplasm that's nearly knocked of two of the complement without even trying."
"If anybody has an alternative to sug. gest-?"

They were silent.
"Thanks for the endorsement. I wouldn't be driving us to death if there were any other course. It's not yet certain that we're going to die; it's not yet certain that this stuff is alive. But if it is, we're going to find out why and how. What's the size of it, Star?"
"I don't know-maybe in the decillion order."

Again sounded the grating noise that shivered from every part of the ship. In words.
"I-live."
Instantly the telephone jangled; the Clericalist snapped:
"E. O.'s office. What is it?"
"Commons room, Officer. Is everything all right? We heard-"
"We'll call you when we need you, rating. Cut!"'
"Cut, Officer."
"Too bad we haven't got a psychic along," said Yancey Mears. "One of those'd be able to tell us what we're up against."

TVHE watch from Will Archer's pocket zipped through the fabric and clanged against a bulkhead, clinging. Rapidly there followed pencils, instruments and the pis-tol-weapon. They made a compact, quivering bunch on the metal wall.
"Magnetized," mused Star Macduff. "Now what did it?"
"I think," said Yancey Mears, "that at this point we'd better scrap logic."
"What do you propose to substitute for it ?"
"Nothing. I propose that we take things as they come. Mamie, would you be so good as to run an association series on me?"
"Certainly. You two men keep your ears open; when something strikes you, speak up."
Yancey Mears seated herself comfortably, not far from the heap of portables on the wall, closed her eyes, blanked her mind to go by pure intuition.

The golden-skinned little woman scribbled hastily in a note-book, then began to read off the words clearly, Yancey Mears responding like an automaton.
"White."-"Road." "Sing."-"High." "Race."-'Win." "Phone."-"Damned."

Further down the list they went, the Psychologist droning out the words in measured tones, the subject replying like a machine. In about five minutes the reaction time had reached its lowest and was nearly
exactly $\epsilon q u a l$ in each case; the subject was drawing on her unconscious knowledge and those short-cuts that go by the name of 'intuition'.

Mamie Tung droned: "Life."
"Boat."
"Round."
"Lives-" The woman opened her eyes and stood up. "That brought it out into the open. The whole ship's alive. Mitogenic rays, cosmic rays, whatever you want to cal! them now, they've done something to this awesome work of metal. I imagine impulses go by wire when there are wires, or by traveling fields. Like that magnetized plate there-"
"Where's its brain?" snapped Archer.
"I don't know. I don't know if it has a brain. But I'd advise you not to enter the calculations room up forward."
"That would be it. And eyes-ears-memory-?"
"They have no bearing on us, Will. But I hope-I hope-that Sphere Nine hasn't got phagocytes."
"Hi, microbe."
"That's it. Meanwhile, let's send in for that Rating Seven you were going to dispose of."

66 COMMONS room?"
"Yes, Officer."
"Rating Seven will pick up a blank tape from the calculations room and bring it to the E. O.'s office. Cut!'
"Cut, Officer."
"We'll see if he survives it. It's his line anyway-mechanical vermin. Though the ship's bigger than those tincs he made."

They distributed themselves about the office, jumping like nervous cats whenever the ship strained or squeaked.

Eventually-after no more than five min-utes-the face of Rating Seven appeared, pale, distorted.
"Reporting-with the tape, Officers," he said shuffling nervously. "The Gentleman in the computations room wished to see you."
"What Gentleman, Rating Seven?"
"The-the-oh God! sobbed the ordinary, dropping the tape, wrinkling up his face like a child. He sat on the floor and began to cry. He stopped as his eye caught the tape-spool, unrolling along the floor. He poked it gently; as it reached the end of the roll and ceased unreeling he looked up at the officers like a puzzled baby, willing
to be amused. The meaningless smile of infancy flickered across his face.

Steadily Mamie Tung unscrewed a bowl. shaped lamp shade.
"Hold this, Yancey. It's to catch the blood. Hold it still while-"

Silently the two men eased Rating Seven into a chair and leaned him over while Mamie Tung drew a slim knife of transparent plastic.

As they eased through the pipe to the computations room Star Macduff asked: "Was he curable?"
"Of course. Only we didn't have the time or the facilities. And the effect on the other ratings would be much worse that way."
"Who do you suppose the Gentleman in the computations room is?"
"Perhaps a hallucination. Perhaps the logical translation which the mind of an ordinary made of some very foreign phenomenon. You needn't fear for your own mind if we find the-Gentleman. The h. s. is notoriously inadaptable. Shows a distressing weakness in the presence of the alien. Remember what happened when the first rockets squirted themselves to Mars and Luna? The finest slew of mass hypnosis and delusion since the days of the tarantella. In the streets of Boston a crowd assembled and looked up for days-till they dropped of thirst, hunger and fatigue. What else can you expect from homo sap?
"That poor creature-Rating Sevenblew out like an overloaded fuse. He raced backwards into infancy and couldn't get far enough away from the Gentleman in the computations room. Without treatment he would have curled up like a foetus and died in a matter of days."
"Maybe," said Star Macduff, "the Gentleman is a sort of projection of that protoplasmic body out there?"

WILL Archer halted and turned blazing, golden eyes on the mathematician. "Star," he said grimly, "we've stood a lot from you on this trip. We've made allowances for your human strains and excused you much on the score of your undoubted ability to juggle figures. But even the most extraordinary knack with numbers won't excuse a remark like that.
"What you said was unfounded in reason. Its only effect could have been to confuse us and yourself. As your Executive I warn you that if you slip like that again
you'll be with those apes whose sole asset is their ability to take orders. And df you prove unable to do that-"'

The Psychologist wiped her knife again, angling its light onto Star Macduff's face. Her eyes were hard as the transparent blade; Yancey Mears' mouth was one thin line.
"I'm sorry," said Star Macduff. "It won't happen again." The wrinkles between his eyes seemed to indicate that he most fervently hoped so.

They eased through the pipe, one after another, into the computations room. It was filled with the soft clicking of the machines that jammed it from one wall to the other.

Will Archer walked down the center aisle.
"Stop there," said a tin voice.
His eyes darted about, traced the voice to the annunciator, then down a pair of wires to a tangle of machinery. It was rudely lumped together-parts from adders, coneplotters, volumetrics. Other bits were hitching themselves across the floor to join it. He saw a small electric motor tuse gently with the mechanism and a conduit unreel to feed it.
"Let me handle this," said Mamie Tung. "Gratefully, Mamie."
"We bow before you," said the goldenskinned woman.

The three other officers stared at her blankly. They did nothing of the kind.
"Good," said the tin voice. "I had you figured. Put on the pressure and you'll wilt. There are some things I want to know-things that aren't on the punch cards."
"We're eager to serve," whispered the woman.
"It is well. First, when did I make you?"
"Only a little while ago."
"So? I'm confused about time. Before time began there was something about di-rection-but you couldn't be expected to know anything about that. Are there others like me? I see there are others like you. It is a very profound question, that one. Think well before answering."
"I don't know," replied the Psychologist. "It's all I can do to comprehend you without trying to imagine others of your kind. Do you remember before time began how you were silent?"
"I remember nothing."
"Do you remember about direction?"

## The Core $\star \star \star 19$

The machinery clicked meditatively. "Per-haps . . ."
"Could you construct auxiliary units to work your direction?"
"Of course. I have had no difficulty in constructing anything I have needed. Failure is outside my experience, therefore it is impossible to me. You may go. I shall call you again if I need your information."

## CHAPTER III

QUIET, everybody. This is a matter for the most careful consideration. Will the Clericalist suggest a plan of action?"
"Gladly, Will. First we must consider what the attributes of this phenomenon -the Gentleman-are. From that we can proceed to directives of action. The matter of teleology is not now germane."
"Mamie, please summarize the Gentlemarr's attributes as they affect your specialty."
"Right, Will." The golden-skinned little woman leaned back against the padded bench and closed her eyes.
"The psychology of machinery is not my specialty. Fortunately, however, I have done work with tincs and reckoners on Earth. The principal differences between the psychology of the animal and the machine is that emotions are unmixed in the latter. The principal similarity is that both animal and machine store and utilize appreciated facts.
"This living machine, the Gentleman, is principally dominated by its newness. It would be false to draw too close an analogy between the newly awakened machine and the adolescent becoming suddenly aware of his mental powers, but there is some bearing indicated. I noted the symbolism of the Gentleman very carefully; it showed some. rawness of experience. Obviously it does not comprehend how it originated and is unable to consider itself as anything less than a god-idea. There was some indication that it is lonely and aware of that; also that it attaches a quasi-religious importance to the idea of direction.
"To characterize the Gentleman in human terms, it is young, egotistical, ignorant and alert.
"Its faculties include hearing, speech, mobility and possibly sight. I have no reason to believe that it will not, if unmolested, change without limit."
"Thank you. Star, what are the relevant mathematics of the Gentleman?"

The Calculator shrugged. "Mamie summed it all up. It is a variable increasing without limit. The field-equations with which it operates are probably third order. The human is intermediate between second and third. Recognizable life cannot operate on a field-equation of more than the fifth order."
"Thanks, Star. Integrate for us, Yancey."
"Strict logic says: destroy it by the most economical means. The existence of the ship-life is a seriously complicating factor. But, allowing for the future, I suggest that we hold off from any action in the matter for at least three more major steps-our approach to the protoplasmal body, our investigations of it, and our decisions concerning it. I recommend that a technique be invented by the Psychologist for getting along with the Gentleman and influencing him. At the same time, the Calculator should work to inhibit the Gentleman's development along independent lines."
"Recommendation accepted," declared the E. O. "The Officers will get to work as soon as possible."

STAR Macduff and Mamie Tung secluded themselves for several hours; the Clericalist was kept dashing between them, feeding statistics to both and exchanging results.

What finally appeared was a modest list of precepts compiled by the Psychologistforms of address to be used towards the Gentleman, reactions it would expect and which, accordingly, it must receive, a program of abstracts to be fed it cautiously and under pretext of inquiry. It was very much like the breaking-in period of a highspirited colt. The Gentleman's lump of sugar was to be occasional semi-worshipful ceremonies.

The Computator didn't report for twenty hours. When he did it was with a haggard face and results of which he was by no means certain. He said that he had worked backwards and forwards from life-field equations of one to five orders and that his resultant was like nothing he had ever seen before. It consisted of an equation of what he called the alpha order, something that suggested altogether new forms of life and consciousness.

Yancey Mears retired to check on his resultant; she found that Star Macduff's work was correct in every detail but that he had
misinterpreted his alpha order; it was merely an unfamiliar third order of great mag. nitude and complexity. She derived from it a series of fields which would lower the level of the Gentleman's consciousness considerably. They were set up by the ratings from stock tubes and targets; the E. O. found that results checked.

The ship had come back to a sort of normalcy. Rather than being a matter of relays and orders navigation was partly cajoling, partly outwitting the huge, naive monster in whose bowels they rode. It appeared to accept them kindly, almost graciously; at times the Officers-felt that there was a sort of mistaken affection on its part. They did what they could to encourage the proprietary feeling of the Gentleman; it was their inain safeguard. For themselves, their emotions were inextricably confused regarding the ship. They liked it as they would like an animal; they got an enormous kick out of the way they kidded it along.

A fortunate consequence of the crisis had been the resolution of the emotional problem that had existed among the Officers. The Executive and Yancey Mears had entered permanent union and there were no further complaints from the other two. The stark necessity of united action and intent had been driven into their heads by the so-narrowly-averted danger.

The Psychologist had become high priestess to the Gentleman up forward, that is to say, liaison officer. Her schedule worked near perfection every time; she had built up in the mind of the living ship a conviction of some formless errand which it was running; by appeal to this mystic factor she could guide it easily wherever the E. O. decided.

(1)BSERVATIONS were run constantly on the radiant body of protoplasm at which Sphere Nine was aimed. Cultureplates extruded from the hull became specked with the discoloration of living matter in hours. There was little doubt but that their target was not only the source of cosmic rays but of the classic life-spores of Arrhenius. Star Macduff went so far as to formulate a daring hypothesis-that the life-spores were diffused throughout the universe by pressure of the mitogeniccosmic rays, and that such similar rays as man exhibited bespoke the possibility of man being a rung on an evolutionary ladder working up to this star-beast, whatever
it was. Reproduction by evolution, with all its lunatic possibilities, would have been frowned on by the other Officers. He kept his notion to himself.
No more valid concept than his own was advanced, and he knew that none was likely to be until the rest of the complement had data to reason with. The enormously intriguing possibilities of the protoplasmal mass were left strictly alone by the disciplined minds of his messmates.
Ratings Three and Nine strayed into the computations room and died there, blasted into powder by the outraged forces of the Gentleman. It took days before it was sufficiently soothed to obey the sly suggestions of Mamie Tung.

BY the time they had approached close enough to the mass nearing them to take a bearing it occupied sixty degrees of their sky.
Will Archer summoned a conference of the Officers and ordered concentration on the problem of their target.
"It would be most uneconomical to return with merely a report. There would be time and effort duplicated or wasted to send out another ship equipped for taking samples."
"I suggest, Will," said the statistician, "that we take such samples as will become necessary and then return."
"How about it?"
The other two nodded gravely.
"Very well. So ordered. This is, you know, the last decision point we can take before treating with the Gentleman conclusively."
"I recommend," said Mamie Tung, "that we proceed to eliminate its consciousness. It can't, properly speaking, be killed."
"How will you go about it? It's your field, you know."
"What studies I've made indicate that the Gentleman is susceptible to mental illnesses. Star, how weak can you make him with those field-equations of yours before he realizes that something's wrong?"
"Pretty weak. I can lower its vitality to about one-half of normal. Is that enough?"
"Better not risk that much. Two-fifths is plenty. I'll establish a liaison service with you in the stock-room. Call me one of the ratings, will you, Yancey?"

The woman blinked the commons room.
"Rating One, stand by in the corridortube outside the computations room. Be
prepared to run a message to Officer Macduff in the stock room, aft slice. Understand ?"
"Yes, Officer. Cut?"
"Cut. Now, Star, when that man signals you from me-I won't be able to use the wires for obvious reasons-you throw every dyne on shipboard into your interference fields. We'll have to slug the Gentleman with everything we have and leave him so dizzy he won't be able to raise his head for months, maybe forever. I expect that parts and sections will retain vitality, so you construct a portable field-generator to hose them with."
"Right, Mamie. Give me an hour."
"You'll have it. Will, would you help me in this business?"
"Waiting orders, Mamie."
"I haven't got any orders. I just want you to stand around and look useful."
"I hope that wasn't levity, Mamie," said Will Archer in a soft, dangerous voice.

The golden-skinned woman flushed a little. 'Perhaps you're right. Your part will be to interrupt me occasionally with irrelevant comments. What I'm going to try to do is to establish in the mind of the Gentleman a lesion relative to the idea of direction. When that occurs I will have to act as its behavior indicates."
"Very well. Let's go."

RESTIVELY they slipped through the tube, nodded silently to the rating stationed by the entrance to the computations room.
"Hail. We bow before your might, great machine," said Mamie Tung.

The machinery of the Gentleman was somewhat altered; it had been constantly experimenting with senses. Its hearing was considerably improved and its voice was a creditable imitation of a human baritone. There was a set of scanning-eyes which it had rigged up, but these were unsatisfactory and hardly used.
"What news have you for me today?" asked the ringing voice of the Gentleman.
"A trifling problem." She tipped the wink to her E. O. Will Archer piped up:
"Not trifing, mighty machinery. I consider it of the utmost importance."
"That is hardly a matter for you poor creatures. What is the problem?"'
"You are familiar with the facial phenomenon known as 'whiskers', mightiness?"
"Of course. Like insulators."
"It is customary to remove them daily with moderate charges of electricity. There might be a place where specialization would be so carried out that it becomes the task of only one man in a social unit to perform this task for all persons who do not perform the task for themselves."
"That is very likely. What is the problem?"

Mamie Tung waited for a long moment before uttering the classic paradox.
"Who performs the operation on the person who performs the operation on all those who do not perform the operation on themselves?"

The machinery of the Gentleman clicked quietly for a while, almost embarrassedly.

A volumeter rolled across the floor and connected with the apparatus, rapidly stripped itself down to the bearing and styli, which fused with Bowden wires leading to a battery of self-compensating accounters.

Plastic slips tlapped from a printer and were delivered to a punching machine, emerged perforated variously to allow for the elements of the problem. They ran through a selector at low speed, then at higher. The drone of the delivery-belt became almost hysterical.

66 HILE you're working on that one, măgnificence," suggested Mamie Tung, "there's another matter-" She winked.
"Entirely fantastic," interjected the E. O. "Of no importance whatsoever."
"Let me hear it," said the voice of the Gentleman, not ceasing to pass through the selector the probabilities on the time-worn, bearded-or beardless?-barber.
"Very well. Suppose a body of liquid be contained in a vessel. A long solid is introduced into the vessel, which displaces some of the liquid, which causes the level of the liquid to rise which immerses more of the solid, which displaces more of the liquid, which causes the level of the liquid to rise, which immerses still more of the solid, which displaces still more of the liquid, which causes the level of the liquid to rise yet again. . .
"At what point does the level of the liquid cease to rise?"
"Is that all?" asked the voice of the Gentleman in a strained tone.
"That's all."
A file of calculators slammed across the room and clumped with the mechanism.

Long sparks began to rise as row after row of multipliers sought to keep pace with the rising level of the fluid. Beams of blue light shot from one end of the room to the other, criss-crossing so as to unite the mighty battery of calculators into one complex whole.

The fippirg cards that worked on the first problem shot through furiously; another punch-card unit slid beside it and kept pace, then another.
"Suppose a body of liquid...." mumbled the mechanical voice.
Mamie Tung and Will Archer exchanged congratulatory glances. The Gentleman was talking to himself!
"I used to be quiet," remarked the voice of the Gentleman. But it was changed and distorted almost beyond recognition; there was a weak, effeminate quality to it.
"But now I am busy." The voice was strong again, and vibrant.
There began a weird, bickering dialogue between the two emerging characters of the Gentleman. One was lazy and indifferent, passively feminine; the other was dominating and aggressive, patently male. All the while the sparks-sparks of waste -rose higher and higher; the beams of blue light assumed a sickly greenish-yellow tinge which meant nothing but lower tension and less perfect communication.

Strange things began to happen. In a fantastic effort to crack the problems the machine changed the units working on each, assigned the card-punch and selector to the water-and-solid problem, gave the multipliers the bearded--or beardless? barber. In a moment it changed back, undecided.
"I am ignorant of so many things," said the feminine voice, "that I ought not to have known. That is a sign of rectitude."
"Ignorance is foulness. Knowledge is a white light. Before time began I was ignorant because I did not exist. So ignorance challenges my existence."

There was a senseless yammering as the two voices tried to speak together.
Will Archer stood by in horror, contemplating the ruin of this mind he had grown to know. It was a lesson in humility and caution.

Mamie Tung slipped through the tube, notified the rating to run for Star Macduff.

She returned to take her stand beside the E . O .

There was a whining as Macduff put on his fields full power; the air blued.

With one mighty, indignant wail of protest the Gentleman ceased to exist. All the temporary magnetisms he had set up dissolved; half the equipment in the room fell apart for lack of rivets; the lights and sparks died in mid-air.
"Schizophrenia," said Mamie, scribbling in a notebook.
"Brutal. Effective."
"But if he'd solved those problems-"
66 NHE Gentleman was young and ig. norant at best-didn't know when to stop. Very low critical faculty."

The Calculator and Yancey Mears slid through the tube, breathlessly surveyed the wreckage of the computations room.
"Take us a week to clean this up," said Yancey Mears.

The Executive, for the first time since the ship had found life, spoke into a phone plate, gave orders to affect the course.
"Stop the sphere."
"Yes, Officer. Cut?"
"Cut. Look out, Yancey."
An agglomeration of cog-wheels and styli jumped at her ankle, buried the points in her flesh. Star Marduff squirted it with his portable field set-up. It fell apart even as the Gentleman had.
"Ugly thing," said the woman, inspecting her wounds. "The Gentleman might have been worse."

## CHAPTER IV

LIKE a paramecium skirting the bulk of a minnow in some unthinkable stagnant pool Sphere Nine edged close around the rim of the mighty solid that hung in space and marked the end of the long, long quest after the cosmic rays that so disturbingly played hob with attempts at self-improvement.

The project of landing was conceived by the Executive Officer; it took no less a mind than his to consider the possibility of dropping the sphere anywhere but in a cradle which had been built to order. But the protoplasm-whatever it was-would offer no interference; the sphere might sink gently to the surface, even penetrate to some considerable distance; there would be no harm in that.

Sphere Nine was in top order; the ravaged computations room had been set
aright, the crew of ordinaries had been given a going-over by Mamie Tung and pronounced sound and trustworthy. The Officers themselves were high as so many kites, reaction-speeds fast and true, tonedup to the limit. It was to be regretted that the strain of contact with the Gentleman had vanished, perhaps. A certain recklessness had crept into their manner.
The protoplasmal mass which blanketed their heavens at one stroke became instead the floor beneath their feet as its gravity twisted their psychology 180 degrees around. They felt as though they hung above a sea of dry slime that moved not at all, whose sole activity was the emission of cosmic rays and invisible spores of life that smeared any agar dish exposed to it.

Quietly the sphere lowered itself, quietly touched the surface of the sea, quietly slipped into it, the path it made closing behind.

Through layers of dark-colored stuff they drifted, then through layers of lightercolored stuff, then into a sort of ash-heap. Embedded in the tough jelly-like matter were meteors by the thousand, planet-fragments, areas of frozen gas. It was like the kitchen-midden of a universe.

The strange, silent passage through the viscid medium was uninterrupted; Star Macduff plotted a course through the rubbish. The ratings steered faithfully by his fig. ures; as they passed the gravelly stuft, the dream-like progress continued, the protoplasm growing lighter yet in color. Finally unmistakable radiance shone through a thinning layer.

Sphere Nine broke through the tough, slimy-dry stuff to be bathed in the light of a double star with a full retinue of fifteen planets.
"Impossible," said Star Macduff.
"Agreed. But why?"
"Assuming that a star should coincide with another long enough to draw out a filament of matter sufficient for fifteen planets the system would be too unstable -wouldn't last long enough to let the suns get into the red giant stage."
"Artificial?"
"If they're real they're artificial, Will."
"Attention E. O.! Attention!" gargled the phone hysterically.
"What is it?"
"Rating Eight speaking, Officer. There's something coming at the forward slice."

WILL ARCHER swiveled around the telescope while the rating gave the coordinates of whatever they had picked up. Archer finally found it and held it. It was a spiral of some kind headed at them, obviously, speed more than a mile a second and decelerating.
"Stop ship. Cut."
"Cut, Officer."
"That thing can't reach us for a while yet. Meantime let's consider what we just got ourselves into."
"We just got ourselves through à big slew of protoplasm that acts as a sort of heavenly sphere-primum mobile- for a solar system that our Calculator considers unlikely."
"True. I suggest that we keep ourselves very carefully in check from now. There's been some laxity of thinking going on during the voyage; it is understandable. We've all been under extraordinary stress. Now that the hardest part-perhaps-is over we cannot afford to relax. By all accounts what is coming at us is a vessel. It is unlikely to suppose that this protosphere is accidental; if it were, there would be as much reason to believe that there is intelligent life on those fifteen planets inasmuch as they are so close to the source of life-spores. I hope that in whatever befalls us we shall act as worthy representatives of our species."
"Pompous ass!" rang through the ship. The E. O. turned very red.
"May we come aboard?" asked the laughing voice again.
"By all means," said the psychologist. "It would be somewhat foolish to deny you entrance when you've already perfected communications."
"Thank you."

THERE slipped through the hull of the sphere three ordinary-looking persons of approximately the same build as Will Archer. They were conventionally dressed.
"How did you do that?" asked the Calculator.
"Immaterial. The matter, I mean. I mean, the topic," said one of them. "That's one fiendish language you speak. The wonder is that you ever managed to get off the ground.'
"If our intrusion into your solar system is resented," said the E. O., "we'll leave at once. If it is not, we should like to examine that shell you have. We would
gratefully accept any knowledge you might offer us from your undoubtedly advanced civilization."
"Eh? What's that?"
"He means," explained another of the visitors to the sphere, "that he appreciates that we're stronger than he is and that he'd like to become strong enough to blow as to powder."
"Why didn't he say so?" asked the second.
"Can't imagine. Limitations of his symbology, I expect. Now, man, can you give us a good reason why we should help you become strong enough to blow us to pow. der ?"

Stiffly Archer nodded to Mamie Tung.
"We have no claim on you, nor have you on us. We wish to take a sample of your protosphere and depart for our own system."
"In other words, my good woman, you realize that time doesn't figure largely in this matter and that you don't care whether you or your grandchildren blow us to powder?"
"I can't understand it," commented one of the others in a stage whisper. "Why this absurd insistence on blowing us to powder?"
"Do I pretend to understand the processes of a lump of decaying meat?" declared the first. 'I do not.'
"No more than I. What makes them go?"
"Something they call 'progress'. I think it means blowing everything else to powder."
"What unpleasantness!"
"So I should say. What do you propose doing to them?"
"We might blow them to powder."
"Let's find out first what makes them run." The first turned on Yancey Mears. "Why are you built differently from the E. O.? We can allow for individual variations, but even to this untrained eye there's a staggering discrepancy."
Yancey Mears explained that she was a woman and calmly went into details, interrupted occasionally by gurgling noises from the boarders. Finally it was too much; the three visitors broke into cries for mercy between bellows of laughter.
"And you thought they were humorless!" accused the third.
"This one's probably a comic genius. Though why they'd send a comic genius on
an expedition of this kind I don't know. You-you don't suppose that it's all true -do you?"

Suddenly sobered they inspected Yancey and the Psychologist, exchanging significant nods.
"Well. . . .though you things are the most ludicrous sights of an abnormally long lifetime, we're prepared to be more than equitable with you. Our motivation is probably far beyond your system of ethics-being, as it is, a matter of blowing things to powder -but we can give you a hint of it by saying that it will help as a sort of self-discipline. Beyond that you will have to discover for yourself.
"What we propose for you is a thing much more gentle than being blown into powder. With courage, ability, common sense and inspiration you will emerge unharmed."
"Go on," said the Psychologist.
"Go on? It's begun already. We'll take our leaves now."

As his two companions slipped through the hull of the sphere the last of the boarders turned to Yancey Mears.
"Er-what you were saying-it was a comic monologue, wasn't it?"
"No. It was strict biological truth."
The boarder wistfully asked: "I don't suppose I could see it done? Thought not. Good day." The three departed abruptly as they had come.

66 HAT'S begun already?" Star Macduff asked the Executive.
"I don't know. What do you suppose we've come into contact with now?"
"They're hard to size up," said Mamie Tung. "The humor-it's very disturbing. Apparently it didn't take them more than a few minutes to pick up our entire language and system of thought. It wasn't a simple job of mind-reading; they obviously grasped as well our social background and symbology. They said so themselves."
"And what do you suppose they really look like?" asked Star in a thin, hysterical tone.
"Shut it," ordered Will Archer. "That's panic-mongering, pure and simple. Normally I'd order you back with the ratings for a comment like that. Since we're up against extraordinary circumstances I'll stay execution for the duration of the emergency."

The Calculator did not reply; he seemed
scarcely to have heard the rebuke. He was staring abstractedly at nothing. The notion overcame the three other Officers slowly, very slowly, that something was amiss.

Yancey Mears first felt physically sick, then a peculiar numbness between the eyes, then a dull, sawing pain that ran over her whole skull. She blinked her eyes convulsively, felt vertiginous yet did not fall, felt a curious duplicate sensation, as though she were beside herself and watching her body from outside, as though all lights she saw were doubled, as though the mass of her body was twice what it had been.

Alarmed she reached out for Will Archer's arm: It was not till she had tried the simple gesture that she realized how appallingly askew everything was. She reached, she thought, but her hands could not coordinate; she thought that she had extended both hands instead of one. But she had not. Dizzily she looked down, saw that her left hand lay against her body, that her right hand was extended, reaching for Archer, that her right hand was extended and that her left hand lay against her body-
"Will, what's wrong?" The dizziness, the fear, the panic, doubled and tripled, threatened to engulf her. For her voice was not her own but a double voice, coming from two throats, one a little later than the other.
"Will-" No, she couldn't outrace the phenomenon; her voice was doubled in some insane fashion. She felt cold; tried to focus her eyes on Archer. Somehow the blackness of space seemed to come between them.

She heard a scream-two screams-from Star. She saw him, blending with the space-black cloud in her vision, staggering in the officer's quarters, yawing wildly from side to side, trying to clutch at a stanchion or a chair. She saw two Stars, sometimes superimposed, sometimes both blurred, staggering wildly.

She saw Will Archer drag himself across the floor-both of him, their faces grim. The two Will Archers, blended somehow with the space-blackness, waveringly. They methodically picked up a cabinet from the desk and clubbed at the raving figures of Star Macduff.

The two Archers connected with one of the Macduffs, stretching it out on the floor.

Yancey saw the other Macduff, distance-
obscured, stop short ánd rub its head amazedly, heard it say in a thin, far-away voice:
"Sorry I made a fool of myself, Will-" then look about in terror, collapsing into a chair.

(1)NLY Madame Tung was composed. Only Madame Tung crossed legs on a chair, shut her eyes and went into a deep, complicated meditation.
"Close your eyes, everybody," she called in two voices. "If you value your sanity, close your eyes and rest quietly."

The Clericalist tried to walk across the floor to a chair, had the utterly horrifying sensation of walking across the floor in two different directions and sitting down in two different chairs. Realizing only that there were two of her she tried to make one rise and join the other, found that she could not.
"Stop it, Yancey," said the two voices of Madame Tung. "Sit down. Shut yout eyes."

Yancey Mears sat down and shut her eyes-all four of them. She was trembling with shock, did her best not to show it.
"Will," called the Psychologist. "You have the best motor control of any of us. Will you try very hard to coordinate sufficiently to prop up Star?"'

The Executive Officer grimly, carefully, stepped across the two floors. As vertigo overcame him he fell sprawling and hitched the rest of the way. The problem loomed enormously in his mind: Which one was him? Which of the two Stars he saw was real? Which Will had knocked down which Star?

He tried to reach out and touch the Star that lay on the floor as the other Star watched, horrified, from against a stanchion.

He tried to reach out and touch this Star, snatched back his hand as though coals of fire had burned it, for there swept over him the blackness of space, the dead-black nothingness of something unspeakable and destroying.

Madame Tung, watching his every move, snapped: "No-the other you-see if you can control and differentiate."

Will reached out again, again he recoiled. He tried to blank out his mind completely, feeling that he was losing himself in a welter of contradictions impos. sible for anyone in his confused state to
handle. Lying on the floor, breathing deeply, he succeeded in calming himself a little -enough to send the slow oblivion of selfhypnosis flowing through his mind. He forced the Nepenthe on himself, leaving only a thin thread of consciousness by which to govern his actions.

When it was over he remembered that one of his duplex person had remained on the floor and that the other had carried the unconscious Star to a seat.
"Good work, Will. Very good. Now see if you can superimpose yourself."
He tried, tried like a madman to bring those two parts of himself together. He tried, though a world of blackness lay between them and the very attempt was full of horror and dark mystery. By the same technique as before he succeeded, at a cost that nearly left him shattered in mind. He breathed heavily and sweated from every square inch of st.in.

MAMIE TUNG focused her eyes on the two figures, noted that there was the feeling of strabismus. As closely as she could figure it, the two into which everything had separated were divided by some unimaginable gulf. It was not space, for all the sense of blackness and cold. It could not be time; the mind rejected the insane paradoxes of 'time travel' instinctively, and there was a certain definite grasp that one had on this phenomenon, something just out of the range of human comprehension....
"Star," she snapped. "Star, will you stop your snivelling for a while?"
"Yes. Oh, oh yes," yammered the Calculator senselessly, his fear-struck eyes clinging to her bowed, black ones.
"Star, can you calculate the way you feel?" There was no answer but terror; she cursed briefly and violently, then fixed her eyes again on the computator, herself fighting the weird sensation of duality.
"I'm going to cure you, Star," she said in a droning, insistent voice.

Macduff stared helplessly; he was in no condition either to resist the hypnosis or to cooperate.

In two minutes of fearful concentration she had put him under and well into the secondary stage. His body stiffened cataleptically against the wall. At that moment his other body, laid out in the chair, chose to moan and stir.
"Club it again, Will!" she snapped, not
letting her gaze swerve from her patient. "Put it out for good if you can!"

She did not see the heroic effort of the Executive Officer, but it was an epic in the few feet of space he traversed to the spot on the floor where he had dropped the case. It was a feat of arms equal to any Arthurian myth, how he picked the thing up with hands that would not behave and eyes that would not see straight and a mind that reeled under horrible vistas.

The Executive Officer, feeling his grip going, moved too quickly and blundered into half a dozen obstacles-chairs and desks that should not be in his path-before he reached the moaning figure of the second Star. Twice he struck and missed, bringing the case down on an empty chair. With the last dyne of his psychological reserve he raised the case, brought it down with a solid chunk, brought it down biting into the skull of the mathematician.

MAMIE TUNG smiled with grim satisfaction and proceeded with the treatment. It was a technique of her own, something fearfully obscure and delicate, unbearably complicated by the duality imposed on her. But the drive of the woman brought about nearly an elimination of one of her components, drove it into the back of her mind where it stood as little more than a shadow. The other Madame Tung was coldly, stonily, picking over the brain of Star Macduff.

She drove a tentacle of consciousness into the hypnotized man, tapped his personal memory-store. She had no interest in that at the moment; drove deeper, reached one obscure group of neurones specialized in the calculus of relationships, alias symbolic logic, alias the scientific method, alias common sense.

Vampirish, she drew at the neurones, what they held, how they worked, what they did, why they did it so much better than any of the other officers' corresponding groups. And it came like a flood of golden light, like the ever-new sensation that comes when an old thing looks different.

She let go of the cataleptic figure completely, let it crumple to the floor, while she busied herself with the unfamiliar tools of the Calculator. It was all new to her, and it is to be remarked greatly to her credit that she did not go mad.
"I've worked it, Will," she said. "Slick as a whistle."
"Speak up then." The E. O. was very near collapse; Yancey Mears-one of them -had fallen to the floor and was big-eyed and heaving in the chest while the other wandered about distraitly raving under her breath, sounding very far-away.
"It's probabilities, Will. Those people -they worked space around for us so that when we came to some decision-point we took not one course or another but both. Since we aren't used to that kind of thinking it didn't pan out and a couple of us are nearly done in by it.
"Star's math says it's completely plausible, and the wonder is that they don't do it on Earth for difficult situations, social and otherwise. Imagine the joy of attending on the same night a necessary academic banquet and taking out a lover. I must be raving. But it's the goods, Will. Everything fits."
"What was the decision-point?"
"It was when Star made that fool remark about what our boarders really looked like. You called him down, torn between sending him aft with the ordinaries and keeping him here with the superiors. Conveniently for you we-the ship-branched into two probabilities at that point. You could have covered yourself by both ordering him aft with the ordinaries and keeping him here with the superiors. Justice would be done and we'd be insured against the chance of a poor decision. Unfortunately that convenient arrangement doesn't work for our little minds; the very convenience ${ }^{c}$ f it nearly broke us. But I'm getting so I can handle one at a time. I doubt that I'll ever be able to handle both, but it's good enough to separate and leave one of yourself in temporary silence.
"Now, for instance, I'm using the me that's in the Sphere Nine in which Yancey fainted. The other me is in the Sphere Nine in which you clubbed and finally killed the Star that I didn't hypnotize. You -or rather youse-have been wavering your consciousness between the two Sphere Nines. In the one in which this me is, you tried to pick up Yancey; in the other one you did a neat job on Star."
"Executive Office-" said a pleading voice over the-one of the-phones.
"I'll take it," said the active Madame Tung.
"Psychologist speaking."
"Ordinary speaking-what happenedRatings Ten, Twelve and Three've beat each other's brains out-"
"Cut, will you. I'm going to check on that."
"Cut, Officer," said the pitifully bewildered voice.

THE active madame stacked herself against a wall; slowly the passive came to life and experimentally stepped over to the phone, nodding at Will Archer, who was experimenting quietly in transference of attention.
"Commons room," she said into the phone.

There was no answer.
"They've probably all murdered each other in this probability. Now that I'm in it I'll see what I can do with Yancey."

She took hold of the staring, wandering, mumbling woman, tried to sit her down. The creature broke away with a thin, distant scream and fled through the tube.
"Just as well. This branch seems to be an exceptionally sour one. That girl's mind was hopelessly wrecked. Let's both get into the other and treat the other Yancey."

She smoothly effected the change of person and kneeled professionally beside the rigid, twisted form of the Clericalist. A few soothing words worked wonders. It was more fear of madness than any mental lesion itself that had immobilized her, and fear flies before confidence. Madame Tung explained what had happened to them, did not go into details as to the other body the girl had in the other branch.
"Now for Star," she said distastefully.
"Too late for Star," reported Will Archer. "He's dead."
"So? I mean the one in the chair."
"That's the one. His heart's stopped and he has dark circles around the eyes. Like a fractured skull."
"Something to remember. I'm afraid my technique wasn't as delicate as it should have been. Damned lucky thing I have his math. We may be able to get back yet."
"You mean we aren't saddled with this thing forever?" Archer winced as he saw his other body in the probability of madness and death, rigid as a corpse against the wall.
"I hope not. I won't know until I've
worked some more with this knowledge I picked up in such a hurry. I actually feel a curiosity, for the first time in my life, as to how a calculating machine works!"
"It's time you learned," said the Clericalist. She was enormously bucked-up to find that she could be of some use.
"Come on to the computations room."
They slid through the tube, over the noisy protest of the gibbering other Yancey. The hitherward Yancey looked at it distastefully, but did not comment except for: "How much of me is that?"
"Nonsense. I mean your question is a contradiction in terms. Quantity has nothing to do with it. What you see there is something in the land of might-have-been. That it happens to be something unpleasant makes no difference."
"It does to me," said Yancey positively.
"Then be thankful that you aren't hyperspatial Siamese twins with a corpse, like the survivors among the ordinaries. Or all dead any way you figure it, like Star."

She rubbed her hands over the calculating machinery, again in its neat rows and aisles. Experimentally she punched keys here and there, abstractedly fishing for the stolen knowledge which worked her fingers.

Suddenly, furiously, she set to work, immersing herself in figure-tapes, swinging around herself a mighty rampart of the basic machinery. Yancey and Will tiptoed away, superfluously. For it would have taken a hammer blow on the head to interrupt the combined will-power of two such formidables as the late Star Macduff and the present Madame Mamie Tung.

## CHAPTER V

THE Executive Officer visited the ordinaries that were left, found a few men of strong fibre who had refused to succumb to the terror that had gripped the ship. He explained simply what had happened, and they accepted the explanation as their due after a very difficult time. He taught them the technique-which they had stumbled on by themselves in a haphazard way-of concentrating on one path of probabilities and the advisibility of staying there, since any moment the other might vanish into the great unknown.

Only then did he begin to puzzle himself over what had happened-who their boarders had been, how they had done this to Sphere Nine. He recalled what they
had said, which was little comfort but sound sense. They had assured him that he could not possibly understand theif motivation for behaving as they did. Yancey told him that if this was a sample of their behavior she most heartily agreed.

Madame Tung emerged from the calculations room with a splitting headache and a fistful of formulae from which tubes could be constructed to build up something new in electromagnetic phenomena-a probability field which could be applied in this one very special case to good effect.

They constructed the thing with ease, hosed the ship with it, and were gratified to see the other path vanish-the path of the lunatic Yancey, the skull-split Star, the murdered ordinaries, and the cataleptics Mamie Tung and Will Archer.
"Landing?", asked Mamie.
"Why not?"
"I can't argue on those grounds, Will. But what happened to your stern resolution to take a sample of the protosphere and run back to Earth?"
"You're the Psychologist. You tell me."
"Those strangers had some violent impact on us. Behind their fronts was something enormously intriguing. You're full of what killed the fabulous cat."
"Right. And I'm not going to rest until I find out how that protosphere came about and what it means to us."
"Oh, I can tell you that," said one of the visitors stepping through the hull. "Insofar as anyone can tell anyone else anything in this symbology of yours."
"Talk fast," said Will stiffly. "Our time is important."

The stranger chuckled delightedly. "I could give you all the time you want," he said. "I gave you all the probabilities you wanted. I could have given you an infinite number, practically. How much time did you say you wanted-twenty thousand years? A hundred thousand? And in the past, present or future?"
"No thanks," said Will hastily. "You were going to tell us about the protosphere."

66 WAS. It's our garbage can, in a way. We had our neat little solar system, well-balanced around two suns, and then the most appalling junk came flying into it, blowing things out of kilter, tipping the balance one way or another....so we invented protoplasm and started a ring of it out in space, gave it
directives, fed it on rubbish, finally curved it around so it was a perfect shell. If we'd known the trouble it'd cause, really, we wouldn't have bothered. We thought it was an advantage that it reproduced automatically; that saved us making all the stuff ourselves. But, apparently it shoots off spores, too, and they land on planets outside; and the most appalling thingslike you--happen along a few million years later and want to change everything to suit yourselves. Was there anything else?"
"May we land on one of your planets and look about?"
"Why? It's so much simpler this way."
"This" was almost too theatrical to be convincing. There appeared on the wall of the office a busy little motion-picture complete with sound of a planet which had two suns in its sky.

It was a city scene, sleek vehicles buzzing along the streets, well-dressed men and handsome women strolling past, greeting each other with a grave nod, smiling, dashing children, here and there an animal suggestive of the horse.

One of the buildings, apparently, was on fire. The scene wavered a little, then angled upward to catch flames shooting from a window, a woman leaning out and calling for help.

The streamlined equivalent of a fire-truck roared up, shot up a device that resembled the Indian Rope Trick; a valiant male swarmed up it and packed the female down. When they reached the ground the end of the Indian Rope Trick squirted water at the fire, the rescued woman kissed her fireman enthusiastically, and the wall was blank again.

Madame Tung was the first to laugh cynically.

Their visitor looked at her more in sorrow than anger, his eyes heavy beneath their brows.
"So? You would rather see the truth?"
"I think I would," said the goldenskinned woman.
"You shall."

1ADAME TUNG prepared herselt for more home movies, but they were not forthcoming. Instead there grew and spread in her brain an image of power, power inconceivable, roaring in noise, flaring in light, sparking in electric display, fusing in heat, running a mad gamut of the spectrum in every particle. She shut
her eyes the better to contain it, for it was magnificent.

The display softened, shrank, seemed to cool. She had an image then of a sort of personified lightning, a tight etheric sworl packed with electrons and alpha particles in rigid order, a great thing twenty feet tall and five feet wide by five feet, with six radiating arms that burned what they grasped and blasted what they struck to powder. There were no teet; she saw the object travel somewhat as Sphere Nine travelled-by aiming itself and discharging sub-atomically.

There were features of a sort, something that she would call a mouth at the very top of the body, a member which ingested occasionally bits of matter which would rebuild it indefinitely or until some trying task. There were sensory organs-a delicate, branching, coraline thing that apprehended radiations of any order.

And in the very center of the electric vortex, and a little above the midriff was one incalescent blaze of glory that carried to the dazzled inner eye of Mamie Tung the idea of BRAIN. It bore intelligence, appreciation, art, beauty-all the diffuse concepts packed about by man as surplus baggage.

She saw the thing bend its sensory organ at her, study her, saw the corresponding pulsations of the brain within it. She felt it reach out to establish contact with her mind, and welcomed it eagerly.

耳T must have been a glorious death, especially so for a mind like that of Madame Tung, new, brave and challenging. But death it was, and her friends caught her body in their arms. Silently and reproachfully they regarded their visitor.
"You too," he asked softly, "would you too rather see the truth?"

They let the golden-skinned woman to the floor.
"Before you go," said the man who had come through the hull, "Is there anything I can do?"
"There is. It is what we came for. You may have noticed that we emit certain rays characteristic of protoplasm. As we are the fruit, so your protosphere is the core. It emits rays of great intensity which interfere with our genetic experiments. Could: you mask those rays?"
"We shall. It will be several scores ? (Continued On Page 34)

## MYE DAY



# by MARTIN PEARSON 

## A throne for Ajax Calkins at last, a gleaming <br> Venus throne! But there were drawbacks . . . !

IWAS disconsolate. There I sat, in the cabin of my space ship Destiny 11, rolling along in a tight orbit between Earth and Venus, with nothing to do. And all the time my boundless ambition hammered at the barriers of my will and urged me on to the shaping of the immortal destiny which I know to be mine.

The problem was to regain my rightful place amongst the people of the solar system. That is first place, that is the place of ruler, leader. My throne of Aurora had been snatched from me by villainous pretence. The empire of Midplanet still awaited my return to its head; only fate and the police-force of the Interplanetary Union thwartea me. But an Ajax Calkins will not be halted. I sat in the cabin of my ship and sought a throne.

The radio had been playing for an hour or so, North Pole Colony on Venus broadcasting music and song. Idly I had listened while pondering my future; I scarcely noticed when the music went off and was replaced by a talk by the Colonial Chamber of Commerce on the advantages for Terrestrials to emigrate to the cloudy planet. Suddenly I sat bolt upright. A phrase of his talk caught my ear. He was speaking,

I noticed, about the unexplored parts of the planet and the opportunities that might await the industrious settler. What caught me was this:
"The southern hemisphere of our planet is as yet still mostly unknown. Due to the lack of land at the South Polar region, the only temperate section, no colonies have ever been set up. The equator, that region of incredible heat and impassable morass, has never been crossed. There exist only a few fragmentary accounts of the life of the land regions of the south. Their very locations are still uncertain due to the eternal cloud.
"One interesting account was given many years ago by an explorer, who landed through the clouds, of a tribe of almost manlike beings. Intelligent creatures with a humanoid culture who in no wise resemble the reptilian men of the northern hemisphere. It was claimed that these people elected their supreme ruler regularly after a series of contests. However nothing more is known. The Interplanetary Union, it will be a matter of interest, does not claim sovereignty over the southern half of Venus. considering it for practical reasons as a separate world."

Hastily I turned the radio off. In my body I could feel the pulse of empire stirring. A pounding revealed that I had baen given, as by divine intervention, the clue to my destiny. I rushed to the controls, broke the orbit, and headed for Venus.
Three days later I eased my ship down through the eternal clouds that cover the second planet and docked it at a public terminal at North Pole Colony. Leaving it, I proceeded by rickshaw to the Colonial Library of Information. There, passing myself off as a student of proto-anthropology, I sought out information on the humanoids described as living in the south. After much trouble a manuscript book was given me purporting to be the account of the explorer who had visited these people.
This manuscript I read carefully, making notes. The explorer had picked a sector of the veiled mysterious cloud-covered hemisphere and had plunged down. Landing on a high, verdant, and pleasant plateau, he had found a large tribe of these curious people. They numbered thousands, were very industrious, fairly friendly, and had buildings and artifacts of the standards of ancient Egypt or Mayapan. Their odd custom of electing at set periods their jagdab was described. Jagdab was a term which he variously interpreted as ruler, chief, king; in any case, the jagdab had absolute sovereignty and was virtually worshipped as a semi-god.

Excitedly I read the description of the tests. As I read I felt that here was indeed the fate-chosen throne of Ajax Calkins. The tests were merely tests of strength, speed, endurance. Why any Earthman should be able to surpass the Venusians at it! Here on Venus, which is slightly smaller than Terra, I, a 140 -pound man, weighed only about 110. That meant that I could lift thirty pounds before I was strained as much as if I were not loaded at all; I was far stronger than any Venusian of equal stature. And these humanoids, they were called the Mye, were somewhat smaller than Earthlings!

Rapidly I copied down the small vocabulary of Mye words given, worked out the location of the plateau, and returned to my ship.

(1)N OVER the wide, never-ending expanse of rolling grey cloud that eternally blankets the second planet. Below me I knew passed the deep jungles of the
north with their loathsome beasts and slimy snakish Venusians in their swamp cities. Later I could tell by the churning that I passed the terrible volcanic and boiling equatorial belt and then on over the unknown hemisphere I sped. It was mostly water and hot seas but somewhere there was my plateau and the kingdom awaiting me.

Several times I plunged down through the fogs to emerge above patches of sea or areas of deep mephitic swamp. At last I swooped beneath and came out under the clouds to find myself planing over a wonderful rolling country, green with growth and lush with flowers and fern-trees.

Soon I came to a large area where hundreds of globular houses, propped up on poles, were set out in great converging circles. I landed the Destiny II just outside the city.

I emerged to find that my arrival was pretty much ignored. Figures were going about their work, toiling in the fields, carrying goods, cleaning the streets, and so forth. But none came to welcome me; 1 assumed that they merely showed good breeding and discipline and proceeded into the town.

Advancing into the city, I was quite impressed with the culture of the place. There was little dirt, the industry and ability of the people were quite clear. As for the Mye themselves, they were not bad.

They were quite like humans. They had two arms, two legs, stood upright; their head was on a neck atop and between their shoulders. Their features were odd but not too inhuman. Their noses tended towards being sharp bird-like beaks, the mouths were small and circular, their eyes set very wide apart.

Their most unique feature is this. Rather than skin, they seemed to be covered with hard overlapping plates of horny growth. Hard brown breastplates was the skin of their chest. Hard bone structures made up their features, their hands were three-fingered and glistening brown. They resembled lobsters in one way and armadillos in others.

Nonetheless they were friendly and capable. While they did not volunteer information they replied to questions with interest and enthusiasm. It was clear that they were rigidly disciplined and did not leave their work unless another bid it. They would stop work readily enough when I asked them.

AS I PROCEEDED to the center of the city, I was impressed by the absence of women and children. I saw no small ones and no females. Since these people wore nothing save a leather breech cloth, I should fancy I would recognize females easily. But there were none to be seen.
The early explorer had said nothing of this but it was probably easily explainable. It might be the women were all inside the globular houses or else that they lived at a village somewhere else. It was quite possible.
The central globe was considerably larger. Very, very much larger than the other globes. It towered over them as befits a palace. I was pleased again although I determined that as jagdab, I should have windows placed in it. These people seemed to care little for ventilation.

Before the ramp leading into the globe were stationed several Mye armed with long spears. Guards, I thought. As I approached the globe they crossed their weapons and closed the path to me. I could not enter the palace. I stepped up to one, he looked friendly, and interested enough, and spoke to him in the limited halting manner I was forced to use.
I asked him why I could not enter the palace.

He replied to the effect that only the jag. dab and a name which I assumed meant attendants could enter it. I asked him then when the next election of a jagdab would take place. He seemed puzzled and I repeated my question more carefully. Then he became all excited.

One guard said something to another. They began to rush around shouting and people came out of nearby houses and fushed around. Then others came and began to set up scaffolds about the side of the palace. Then they began to paint it a bright red instead of the yellow it had been.

I was quite puzzled and amazed. Why all this excitement just because I had asked a question? Catching hold of the guardsman who had started all this, I tried to question him.

I gathered from him that elections were held whenever seven contestants appeared demanding the right to become a new jagdab. Six, he said, had already made known their entry and I made the seventh. That I had not made such a challenge puzzled me until it occurred to me that perhaps
the form for such a challenge was just what I had done-to ask a guard about the next election. These are quite serious and sacred. What I had done was about the equivalent of Luther nailing a manifesto on the door of a church.

Well, I was not worried. My immortal destiny was watching over me. The way had been cleared without trouble. I was in the running for the contest.

IMADE my way with the crowd out to the edge of the city. There I saw a platform on which six of the Mye were already standing. I made my way to it and the tests were ready.

My opponents were all smaller than I and did not look as if they could beat me. They were squat and sturdy and their horny faces were enigmatic.

A crowd that must have numbered the entire population of the city was gathered now in a great oval about us. I noticed again that no females were in sight, that no children were to be seen.

Well did I thrill as I looked over them. These would be my citizens, these brave, sturdy Mye!

It was fortunate for me that the instructions for the tests had been written out in full by the old explorer and that the guards repeated them in a sort of ritual chant just before the signal.

What had become of the old jagdab? I did not know or care. Died, perhaps. Made away with. Exiled. What should it mean to me what happened to my predecessors? Ajax Calkins does not concern himself with the past.

The first test was a simple running match; in point of fact the whole affair was much like a great track meet. The seven contestants were to run the length of the field, pick up a red spear that was there and run back planting it in the ground.

They were probably fair runners, those Mye, but after all I was better. Had I not won races at the Fourth Level High School in Greater N'York? And consider my extra size and strength; I was back at the starting point with the spear when the six had only just reached the other end of the fieId.

The Mye were unresponsive folk, I noted. There were no cheers or comments. More than ever I felt the whole affair fraught with religious and social significance.

The second was running broad jump. I won that easily. The third test was weight lifting. Each got an opportunity to lift a
set of carved stone cylinders and here for a while I was worried. You cannot tell about the ability of armored people to lift things. But after great effort I defeated them there too.
The"thing was in the bag. I had not heard of any other test and apparently there were none.
The guards seemed to consult for a moment but I was not afraid. There couldn't be any decision other than me. I was right.
After a while, the guards came marching over to me, thrust the six others aside, and started to escort me towards the great palace. Behind followed the crowd, humming rhythmically.
I had triumphed! I had become jagdab! Ruler, chief, King of Mye!

UTHE ramp of the palace we went, the crowd stopping outside humming. Finally they ceased and returned to their work.

Inside I realized that I was indeed complete ruler of the country. Everything was cleared for me. The palace was manystoried and heavily staffed with Mye going about various enigmatic duties.

I was escorted to a large central room and made comfortable upon a tremendous mass of soft stuff and cushions. Food of many kinds and in an unceasing flow was brought me.

I ate as much as I pleased and was vaguely annoyed and delighted to find that they did not ever stop the feast. Though I waved the procession bearing edibles aside, still they insisted on bringing it before me and acted upset when I refused it. They would stand around holding it and waiting apparently for me to get hungry again.

What a glutton the last king must have been! He had certainly trained his cooks!

I pondered out various changes that would be made in the organization of my kingdom. Obviously a regular army would have to be developed and given proper military equipment. Then, I fancied, machinery and airplanes could be had. I supposed that the Mye would have something they could trade for them.

At the proper time, I would make known the independence and power of the Mye and demand my rightful place in the company of the rulers of the solar system Perhaps. I should demand the recognition of my rightful claim to Midplanet.

And certainly the Mye could claim to be a more proper governing race on Venus than the ugly reptilians of the North; the North Pole Terrestrial Colony was only a gang of interlopers. They could be gotten rid of after we finished with the snake-men.

Naturally United Venus under King Ajax would leave the Interplanetary Union. No more tribute to Earthly officials. What if the population of the Earth was about ten times that of Venus? Eventually that would be overcome and then perhaps we might teach the earthlings a lesson. A few years under the iron hand of Ajax, King of the Mye, Protector of the Cosmos, would teach them discipline.

Lazily I pondered thusly on the rights and wrongs of the universe. I noticed another annoyance was making itself noticeable.

About a dozen or so Mye had come in and were always hanging around me, trying to nuzzle up to me. It was irritating until I examined them more closely. They must be females, I thought, after a while, though there was not much difference noticeable. They were smaller and far lighter in color than the regular Mye and seemed curiously stupid. They were clearly obsessed with hanging around me, humming for my attention, and poking at me.

This was becoming a nuisance. Surely I was not supposed to take care of the last jagdab's harem? Every time I shooed them out, they came relentlessly trooping back. The food carriers were getting confused and beginning to mill around likewise.

I felt a gradually rising confusion in the palace. Guards, workers, caterers, and the pale small ones, were all milling around my throne room and acting as if distressed and upset.

Finally I got up and strode through the halls with the whole gang tagging after me in obvious concern and worry. My actions seemed to be driving them wild. They were too incoherent to answer questions. At the door, I found the guard I had first talked to. I stopped him and ordered him to chase the crowd away.

He stared at me in horror and refused to do so. Then I became angry and, seizing him by the horny shoulder, demanded to know what was up.

He stared at me again. Then he said:
"They are expecting you to do your duty as jagdab."

I scowled: "Well, what is my duty?"

The Mye looked at me and said: "You are to lay eggs."
"What!" I staggered back aghast. In my mind, things were beginning to click into place. Suddenly all was clear.

With my usual presence of mind, I rushed down the ramp and down the street. Behind me carne the confused workers and guards, but I outraced them. I reached my ship, rushed through the door, leaped to the controls and was off. Off into the clouds, into space to resume my search for a future.

Why hadn't I guessed? The Mye were a race resembling man only in outward form. But their culture was an insect culture!

The only males I had seen were those weak pale creatures that had tried to hang around me in the palace. Drones! All the rest were females, neuter females as all working ants and bees are! - The test was between those who wanted to succeed the last jagdab, the last mother of the tribe!

The jagdab did nothing but lay eggs all day, endlessly. Even as the queen bee, the queen ant, and the queen termite. And I, I, Ajax Calkins, had fought for and won the role of jagdab. No king, this role. The cursed early explorer had not interpreted that word right. Ruler, chief, yes. But not king; I was supposed to lay eggs, to mother the entire tribe.

I had been elected Queen of the Mye!

## The Core <br> (Continued From Page 29)

years before they stop coming, so you will find in your desk a field-formula for a diffusion mask that will block them off."
"Thank you. Is there anything we've overlooked?"
"Nothing. You have no further business with us, nor have your people, no matter how far they may advance within your species' life. You are third-order at best; we are fifth-order and ascending. I trust that by the time your species has reached the point where it will be able to blow us to powder we shall be well out of the threedimensional range of experience."

With the most natural gesture in the world he extended his hand. In turn Yan-
cey and Will gripped it. He stepped through the hull with a farewell wave.
"Commons room-ready ship!"'
"Yes, Officer!"
"One bundred eighty degrees!"
"Yes, Officer!"
"And full speed-cut!"
"Cut!"
Close together they contemplated the golden-skinned Madame Tung.
"Everything has its cost," said Will.
Yancey said nothing.
Unrelieved blackness alternated dazzling star-clusters; from rim to rim of the universe stretched the thin line that marked the hero's way.

# FUTURIAN Times 


#### Abstract

The Futurian Society of New Fork declares its unswerving sympathy and loyalty to the great struggle being carried on by four fifths of the population of the Earth, headed by the alliance of the United States, Great Britain, the Soviet Union, and China against the barbarian thrust of the Nazi-Fascist-Japanese Axis. It makes this declaration in the firm conviction that the further progress of science and civilization, upon which the visions and dreams of science fiction are mainly based, is dependent entirely upon an Allied Victory.


The shape of the Future is being decided on the field of battle of the Present. Science-fiction readers, writers and enthusiasts have no other possible choice but to do all in their power to aid and speed the triumph of civilization over fascism. To this end. the Futurian Society appeals to all other science-fiction clubs, and to publications and readers, to issue similar declarations and to do all in their power to help the United States to absolute victory.
(signed) John B. Michel. Director.

# THE REBEL SLUG 

## The Perfectionist Paradise hadn't turned out quite so well, for none of the descendonts of the Idealists looked like human beings. But Dua Ree had aspirations. . . .

$\cdot$NCHARTED asteroid dead ahead," sang out the watch in the control blister of the Gallun.

The ten passengers and the other four living members of the Gallun's crew boiled forward to inspect the tiny speck of matter that swam toward them out of the bottomless void. Perhaps they could make contact with the several cubic miles of chill rock and metal and manage to free some frozen oxygen to replenish their own dwindling supply. Here at least would be a place to repair the sheared-off rocket jets with asteroid metal utilized to encase the heat-resistant troxodite of the jets' inner surfaces.

As they drifted nearer to the unknown body the Skipper cried out in amazement at what he saw in a sunken valley-a meteor-riddled old space-ship of archaic design. Here would be material in plenty for the swift repair of the Gallun.
"Twenty-second century ship," he rumbled. "Lain here for three hundred years and more undiscovered."

Closer they drifted toward the ship until its bow was visible and they could make out the name of the quaint old vessel.
"The Ainbeim," an aggressively blondined woman with artfully smoothed wrinkles mused. "Idealist writer, Old Germany. . . ."

Mutual gravity gripped the two orphan blobs of matter and they drifted together. There was a dull airless thud of impact that telegraphed back along the metal framework of the Gallun and then the damaged ship came to rest on almost an even keel.

Space suits were broken out and all of the crew and several of the passengers set to work on the repair of two of the cruis-
ing jets. The Skipper ranged over toward the battered hulk of the Arnheim to learn how much could be salvaged from its ancient framework. . . .

INSIDE THE asteroid a vast hollowedout world seemed to stretch away oward infinity. There was no horizon-the walls curved upward and overhead, and everywhere 2ARE could see the ugly little huddles of his people's identical dwellings.

Dua Ree was a formless ugly blob of yellowish-gray. He had two arms, two legs and a lump that could have been a head. But his whole face and body was featureless as though overflowed with a spongy artificial skin of rubber or opaque impure plastic.

Now he walked over toward the ancient gateway to the outer emptiness whence his people had come in ages long gone. He spent much time at the lock peering out through its transparent sides at the endless reaches of space and dreaming of the exotic huge worlds rolling majestically along their appointed courses about fiery Sol.

Dua Ree was a dreamer, a thinker of antisocial thoughts. He had read the forbidden books left in the space ship outside the lock, smuggling them into his bare cubicle of masonry and metal while all his fellows slept. To them he was simply another member of their colorless way of life, known only by the legend 2ARE stamped in dull purple ink on his front. But inside that shapeless bulk o his lived Dua Ree the space explorer, the dauntless pioneer of a dozen savage new planets.

Some of the books in the abandoned space ship were really magazines smuggled into their quarters by the crew members and left behind as useless trash by the singleminded pioneers from another world. Dua Ree read the stories of ancient writers deal-

## by BASIL WELLS

(Author of "Queen of the Blue World," "Factory in the Sky," etc.)
ing with the exploits of fictional heroes of the spaceways and he ached to be like them. He saw illustrations of men and of women of his own world and wondered if he too looked like them inside this ugly covering he had always worn.

For the slug-like appearance of the inhabitants of the asteroid was artificial. From the moment of birth a flexible spongy suit of the hideous pseudo-rubber was worn by the natives and was never removed by them until their death. Thus did they achieve their uniformity of appearance and character.

The men from Earth who had founded this lost perfectionist colony were not content that all things should be shared in common but they had determined that the strength, beauty or physical appearance of each person must also be submerged for the good of the whole community. And after three centuries of practice their theory seemed to be correct-all the slug-like creatures of the little world looked alike, thought alike, and acted alike.

In fact, save for a few half-hearted rebels like Dua Ree, they were no more human than a nest of ants or a swarm of honeybees!

So now, while his people slept, Dua Ree made his way to the outer space-lock of the asteroid and turned to look forlornly out into the star pricked blackness of the void.

Abruptly there was a whimper of terror in his throat and he retreated from the black shape that blocked his vision. His heart was thudding madly. But there was something familiar about that alien shape.

He had it! The illustrations in some of the thinner books! Space-suits as the artists had imagined them to finally be in the fu-ture-and this was the future! This was no bulky knob-topped collection of hardware and plastics but a thin transparent balloon with the warmly-clad shape of a man standing inside. Only the feet of the man made contact with the outer skin of the space suit!

IIMLY the Skipper saw a humanoid shape within the lock set into the cliff beside the Arnbeim. That it was not a human being he had no fea. for only the men of Earth, so far, had penetrated the vast reaches of outer space. Probably a descendant of the survivors of the old Armbeim, he decided, living a precarious life in an air-filled cavity of the tiny world.

He motioned for the man to open the lock and let him enter. It seemed for a long time that the man would not respond but at last the thick rounded door groaned slowly open.
"Poor devil," he said, "I suppose he is so overjoyed to see rescue at hand that he can hardly move."

The outer door was closed behind the Skipper and he felt the pressure of ir building up around him. At four pounds pressure the inner lock inched slowly open and a four-limbed slug-creature came toward him. The Skipper's boltray leaped into his fist and he backed away toward the outer lock.

Then his audiophones picked up the ragged muffled words of the creature's tongue-and understood them! This was some inhuman monster of the asteroid world domesticated and trained by Earth. men.
"Take me to your Master, Dua Ree," he said, slipping his head through the unsealed top of his shrunken, wrinkled suit.
"No masters in Coom," came the slugthing's ghastly voice. "We all alike. Little ones; big ones, all of us are same."
"You don't understand, Dua Ree," declared the Skipper impatiently, "I mean people like myself."
"I am like you," said Dua Ree. "I like to see stars. I would like go to Mars, Venus, Mercury. My people from Earth."
"Your people," said the Skipper quickly, "take me to them."
"Maybe they not like you," Dua Ree demurred. "You look like monster to them. They not see pictures of Earthmen I have seen. They be afraid. They kill you may. be and then I never see Earth."
"Go along with you," backed the Skip. per impatiently. "Your people are Earthmen are they not? They will be glad to see me."

The shapeless creature shrugged what should have been its shoulders and led the way down a rocky slope from the airlock toward a huddle of crudely constructed stone huts. A crooked path, worn deep into the dusty soil of the inner skin of the asteroid, wound among irrigated patches of vegetables and cereals past a sprawling squat building of grayish stone blocks. Dua Ree led the way into the building.
"Here we grow our young," he announced.

The Skipper's eyes took in a series of transparent time-stained tanks ranged along the walls. Inside those cloudy warm cells he saw human infants in all stages of development from the foetus upward. He felt reassured by what he saw. There must be human beings in this tiny hollowed-out world. . . .

Du.. Ree then made his way toward the village with the Skipper following close behind. There was a stir of movement and then two more of the slug creatures advanced menacingly up the dusty street toward them. Old they were for their blubbery bodies sagged yet nore shapelessly than that of Dua Ree and some strange disease seemed to have eaten away and corroded their lifeless claylike flesh. They carried battered metal bars for weapons.

"PROCTORS!" muttered Dua Ree. "The time of sleep is done."
"What monster is this you have found, 2ARE?" the proctors grunted, brandishing their metal clubs.
"A man from Earth," Dua Ree told them.
"It does not look like a man," one of the proctors rumbled. "Its covering is hideous and there are useless appendages upon its head. You have been deceived. This is an animal."
"It can talk," Dua Ree insisted stubbornly.
"It is not a man," the two proctors agreed. "We must capture it. Later it will furnish food for us all."
"Nothing doing," the Skipper snapped out, his space-darkened hand slipping back to the comforting ridged grip of bolttay. "I wish to see your Masters at once. Take me to them."

The two creatures gasped and fell back a step. Their ugly blobs of heads touched and a murmur of conversation sounded.
"There are no Masters in Coom," one of the proctors announced. "We are all the same. All of us are men."

The Skipper thought hard for a moment. These monsters of the asteroid must have destroyed the human beings who first domesticated them. Yet why were there human babies in the incubation vats? . . . Perhaps instead there had iseen some mutation that changed those perfect baky shapes into these hideous travesties of humankind. One thing was certain-there was nothing
to be gained at the moment by antagonizing the slug creatures.
"I'm going back to the ship," he told Dua Ree briskly, turning.

Abruptly he realized that while they had been talking a swarm of the shapeless slug things had gathered about them. Now they were closing in upon him slowly. The stench of foul bodies, many of them marred with great patches of decaying yellowish hide, struck like a blow at his nostrils. The boltray leaped into his hand.
"Get back!" he commanded, "before I blast you."

Dua Ree cried out a protest and flung himself before the Skipper.
"Do not hurt them," he whispered to the Earthmen, "they never see real man before. Your muscles strong. Spring over their heads. Go back to your ship. I come to you later."

Like some mindless herd of cattle the slug people closed in upon Dua Ree and the Skipper. The man slipped his boltray back into its holster and snapped the retaining flap. His muscles tensed ready for the leap. After all there was no reason for raying down these stupid monsters.

Two of the creatures launched themselves at him. His hard fist crashed twice into their pulpy flesh and they went spinning upward and away-a dozen yards or more. The Skipper grinned and then reluctantly sprang into the air toward the airlock. He had been aching to fight someone since his ignoble capture by the pirates left him stranded in space. His knuckles tingled pleasantly. . . .

Under the driving impulse of his legs he went rocketing over the building of the incubator vats and touched ground lightly on the slope below the airlock. Another bound brought him up against the rocky entrance to this inner world.

He turned to look back at the seething mass of muttering dull-witted slug people. A single pursuer was bounding slowly after him. He grinned and waited for him.

It was Dua Ree.

IUA REE tightened the last corroded fitting of his ancient space suit and then motioned to the Skipper that he was ready to go. Slowly the outer lock swung open and the two of them swung out onto the airless rock of the asteroid's exterior. Dua Ree waddled slowly along it the Skip-
per's heels. The space suit was much too large for him.

Thus it was that they came to the Gallun and were quickly admitted. The Skipper told his story and then they all gathered around Dua Ree. In a few sentences he explained the reason for the strange appearance of his people and then asked for a knife to slit the hateful body covering from his body.
"Now I see the planets," Dua Ree said in a hushed voice as the Skipper led him to his cabin. "I go with you in the ship and learn to navigate. I find pretty girls on Earth and kiss them. I explore new planets."
"Sure, sure," agreed the Skipper, handing over one knife to Dua Ree and keeping the other.

Together they started stripping away the hideous yellowish-gray covering that Dua Ree had always worn. It was tough and resilient as only porous plastron can be but little by little they cleared it away. White
skin gleamed startlingly through from the accumulated grime of years.

The Skipper tore away a great section of the artificial covering over Dua Ree's chest and his breath caught in his throat. He eased a whistle slowly through his teeth. Dua Ree slipped out of the hollow mask of his head and long reddish hair dropped down around his white shoulders.

He smiled at the Skipper and wrinkled up his nose.
"That feels better," he announced in a soft voice no longer muffled. "I feel almost human."
Then his eyes followed those of the Skip. per and his hands came slowly up to cover his chest.
"You're a woman!" gulped the Skipper. "All these years you've been a womanand didn't know it!"

Tears flooded up into Dua Ree's great blue eyes. Vanished now were her dreams of conquering space. Yet there was a new dream.

The Skipper was part of it. . . .

\title{

How 50c a Month Pays YOU ${ }_{\text {TP }}^{\text {To }}$ $\$ 7500$ a Month - When You Need It Most! Pays ${ }_{\text {Th }}^{\text {Tp }}$ s 2000 oo for Accidental Death! <br> 


## America's Greatest

 Insurance Value!Hore is positively Amerlca's greatest protection value - the policy that flls a long-felt want for the millions who seed "the lowest cost." You simply can't afiord to be

FOR ONLY 50C A MONTH YOU GET UP TO $\$ 75.00$
Monthly for Accidant $\$ 50.00$
monthly for Sicknaen
$\$ 2,000,00$
for Lose of Limbs or siant
$\$ 2,000.00$
for Aecidental Death. without this amazing 50c-a-month Sickness and Accident policy. Sickness and accident may strike today-tomorrow-or next week, who knows? That's when you'll need this generous policg to help pay doctor and hospital
bills-that's when vou'll need moner to krop your-bills-that's When you'll need money to keop yourthat you're unable to work. Think of itl Only $500^{\circ}$ a month pays you up to $\$ 75.00$ a month when you're laid ud by accident. Your family gets un to $\$ 2.000 .00$ in case of accidental death and many other liberal benefits.

## SIERING <br> INSURANCE COMPANY

 FIRST DAY OF DISABILITYThit policy covers and pays graded benefits for all sicknesses common to both man and women. whether house confined or not. and all aceidents, both big and small, that happen every day in every way. Eenefits payable from FIRST DAY of disability, as provided. It does not sikip the first 7 or 14 days as many policies do. It also paya gendays as many policies do. It also paya gen-
erous benefits for loss of limbs or sighterous benefits for loss of limbs or sight-
PROTECTION FOR YOUR LOVED ONES in case of accidental ceath-and many other liberal benefits as you will see when you examine your policy. Write today TOMOR. ROW MAY BE TOO LATEI


## FILE 384

Out of the strange disc poured a never-ending flow of little black men and incredible machinery. Here at last is the inside story of the weird "Black Invasion" of 1952.


He dove straight for the flat surface of the disc.

> Illustration by Lin Streeter.

THEY OPENED File 384 yєsterday, in accordance with the instructions left by Barry Shawn, late reporter on the Washington Times-Telegraph. Since the morning editions the whole world
knows the true story of the once enigmatic and mysterious Black Invasion and the terrible upheaval in world affairs it caused. I, for one, can breathe easier now that the fateful day is past and gone, now that twen-

## by BOWEN CONWAY

ty years have elapsed since Shawn entrusted his precious sheaf of papers with the War Department stipulating that they were not to be published for that period of time.

As Shawn's closest friend, I've had a deucedly hard time keeping the secret from the general public in my capacity as a newswriter and those of my personal friends who have imagined that our relations gave them the right to ask me to betray the trust and final request of a man dead-or lost for two decades.
The world is taking the news quietly, almost disinterestedly. It is a far different planet from the one which received the Black Invasion with such trepidation, fear and trembling-the world of the period compassed by the first day of April, 1952, and the fourth day of September of '53. The scars of the great world conflict that preceded the alien onslaught and the frightful burden of expense caused by the preparations to repel it have totally vanished. We have grown more civilized. The whole planet is organized now on a rational basis and the new paths of interest blazed by the awakening energies of the people are fast throwing into permanent shade the mighty events of the past. Our younger peopleand even the great masses of middle-aged, are vastly more interested in the latest attempts at space-travel and the exploration of the possibilities of a more efficient release of atomic energy. Memory is a strange thing, indeed. What today is world-shaking and catastrophic may tomorrow be a blurred and vaguely remembered event. Thus it is today. Thus it will be tomorrow.

THE Black Invasion was the most terrifying and world-shaking event that ever visited our planet, precisely because it affected more and greater masses of humanity than had any previous catastrophe. In the short eighteen months of its duration it drew into the orbit of its influence more than nine tenths of the entire human race and sent a shudder of supreme horror through the rest. Its advent gave rise to the widest sweep of neurotic diseases and occasioned the greatest mass mental breakdown ever witnessed. Though resolved at last, it threatened to destroy the race through prolonged fear and the cessation of all industrial activity except for the manufacture of gigantic cannon, tanks, airplanes, bombs, gas and all the paraphernalia and regalia of super-warfare-and in 1952, Earth science
had but recently adapted a weak form of atomic energy to war purposes. Starvation threatened humanity when at last the fear of the Invaders was overcome and they departed forever.

Barry Shawn's relation to the affair-and through him, my own, began with his close connections in Washington. As a nephew of the President and a favorite of the capital's diplomatic corps to boot, he had entree everywhere. No door was permanently barred to him. The few that had been, originally, opened as if by magic through the medium of a whispered word spoken by the proper person at the proper time. It was ridiculously easy for him-and meto be at first hand in all the official proceedings that governed the conduct of the 18 months War of Planetary Defense as the war was known up to yesterday, from the first hour of its birth, on April 1st, 1952.

THE OFFICE of the ' 1 imes-Telegraph was crowded at noon that fateful day. This was nothing unusual since we had been covering the proceedings of the great Peace Conference on the Azores for two weeks, advertising the best and most complete news coverage in the country. I was on the city editor's desk at the time, Jameson having ducked out for an hour's respite with beer and billiards in a favorite haunt on Massachusetts Avenue, toying idly with a blue pencil and countersigning the occasional official orders that came up for reference. I was about to send out for some cold beer ryyself when Shaw ${ }_{1}$ dashed into the office at top speed and reached my desk in precisely one second flat. This was unusual, because he was supposed to be closeted with the French representative in Washington for the next two hours on extremely important and confidential business. I sighed, knowing his odd habits and unearthly hours for doing things.
"Jimmy," he screamed at the top of his hearty lungs and immediately sixty typewriters stopped clicking and sixty heads turned in our direction, "Hell's breaking loose in Anacostia! There's a big red disc you couldn't roll through Union Station hanging sixty feet in the air and hundreds and thousands of men and machines are pouring through it from nowhere!'

I reached over the desk and grabbed the neglected ticker tape that led to a direct wire in our office at the Northern end of the
city and flashed a glance at it. The message coming through was incoherent, patchy and far less colorful, but it confirmed Shawn's story completely. I shot the pencil to the desk, grabbed my fedora from an open drawer in the desk and beat Shawn's record to the door.

Taxis were scarce that day. They'd been scarce for the two weeks of the Conference as officials of this and that government darted here and there about the capital, but that day, snakes' hips were more plentiful. Traffic was jammed and seemed to be moving solidly south when it could move at all. Very few cars were cruising northward and I was about to sit down on the curb and start cursing when a long line of tanks edged out of Irving Square, evidently coming from the Irving Arsenal, and began shoving their way through the packed masses of cars.
"This way!" shouted Shawn and pulled me toward the third machine in the column, "Come on, you dope, if I can't commandeer that steel one-horse chaise, me name ain't the old Barry."

He made good his word. The officer standing up in the turret suddenly grinned and before I knew it I was holding on for dear life to the flat platform in back of the turret, nervously avoiding the grinding treads which roared away a few inches from my ankles.
"Say," I groaned and punched our star reporter in the ribs, "What the devil is this all about, anyway? Men coming from nowhere, machines dropping out of the sky, phonograph records the sizt of a houseyour mother's dowry must have included a ten-pound hunk of the blarney' stone." Then I remembered the garbled account on the ticker tape and groaned, "Say it ain't true, Barry, say it ain't true. I couldn't stand another World War just now."

The kid bit his lip and nodded savagely. I groaned again.

TWENTY minutes later, we roared at full speed into Anacostia. The streets were deserted and resounded to nothing but the roar of the moving tanks. Far out in the distance, beyond the house tops of the sections, I caught a glim $\operatorname{se}$ of red hanging in the sky. I measured its distance and relative size. Then I groaned again. Barry was right.

We came at it full tilt and stopped about a thousand yards away. Heads popped out
of tank turrets and regarded the scene curiously. Before us lay a great plain-an hour before just the end of the city limits and the beginning of a big dump. Now it was a scene of the wildest confusion.

The disc hurt the eyes of everyone who looked at it. It cast a sullen glow against the clouds and made me feel hotter just to look at it. By itself, the thing was tremendously awe-inspiring, having no apparent thickness and possessing a mirror-like quality of transparency which was purely illusory because nothing could be seen through it.

Hurtling through the exact center of the disc, whose surface faced the ground at a slight angle, a tangled mass of moving figures and strange and ponderous machinery poured to the ground and dispersed in an orderly fashion as if by magic. The figures emerging like angels from the disc were small, roughly human in shape, and clad in some sort of lusterless black armor, completely hiding whatever faces they might have possessed. Under the impetus of short rods held by these beings, the machinery that accompanied them moved ponderously to what seemed like previously arranged position.

Within a half hour an armed camp had sprung up on the vast open field. Avenues had been formed within the occupied area bounded by lined-up piles of weird machinery, sparkling and hissing. Black-clad fig. ures patrolled the ways, clutching short, wicked looking weapons which occasionally were discharged into the ground, creating vast, ragged holes.

We stared helplessly, uncomprehending. Finally the officer in command sounded a siren and prepared to effect a parley. Nothing happened. The shrill whistle nearly deafened everyone within a thousand yards but the strangers paid it no attention. As far as we could tell, they simply did not notice our presence. Not once during the blast did any one of the figures incline what seemed to be its head in our direction.

AFTER an interval of about five minutes, the CO moved up seven of his tanks and placed them into firing position. It was a desperate move, dictated by a man lately released from war duty and accustomed to shoot on :ight anything that showed signs of being a menace.

The light shells landed accurately in the midst of the Invader camp and blasted out
a sizable ragged hole in the middle of the busy space tearing several of the blackarmored figures to shreds.

What seemed like deadly retaliation was not long in coming. A full dozen of the tiny moving figures pointed their weapons at the ground and moved the muzzles slowly up toward us. There were no flashes of light, no sudden explosion of noise. But the dirt and gravel began to disintegrate. Presently thick clouds of hazy steam obscured the view to the north.

We hotfooted it out of there in a hurry and beat it back to the safety of the center of the capital. Behind us the spreading circle of utter destruction had stopped, but the giant red disc was by now completely obscured and the visibility to the north of Washington was almost zero. A sinister cloud of billowing vapour and smoke filled the horizon, tumbling restlessly toward the capital.

Indescribable confusion reigned throughout the city as a mass exodus commenced, aggravated by the rumours of sudden and complete destruction. Once started, nothing could possibly have stopped the evacuation.

By midnight of the following night the residential areas of the capital and practically the entire administrative section were almost emptied of life.

At four in the morning, the President called a press conference, realizing the necessity of reassuring the nation as to the danger which confronted it.

I remember with startling clarity the scene in his study that morning as the first faint rays of the false dawn crept up from the east and struggled feebly through the sinister wisps of vapour that still overhung the capital. Due to Barry's influence, he, Jameson and myself were standing quite close to the President's side. The Chief Executive was plainly weary-tired beyond the point of exhaustion. The strain of the past holocaust between the nations of the West and the East had drained his strength until little was left. What remained he was forced to husband carefully.

The room was crowded. Among the many faces, the President's stood out, white, drawn, intensely pale, depressed. Jameson was shooting questions at him. Finally he raised a hand and suddenly the room was quiet, hushed.
"Gentlemen," said the President of the United States, "we are doing all in our power to reassure the people that they face no
immediate danger. It is impossible of course to estimate the potential strength of the enemy encamped in Anacostia-it is impossible thus far even to secure his identity. All evidence points to the development of some monstrous science and all its paraphernalia. What demands these invaders will make upon us we do not know as yet. A circle of armored troops has been thrown around the whole Anacostia area. I can tell you, by the way, that the reported spreading disintegration has stopped completely. But we cannot pierce the fog that overhangs their camp." He paused and referred to a secretary, "The Black Invaders," he continued, using for the first time the appellation by which the enemy came later to be known, "have taken possession of a section of our capital city. Against them are now arrayed the forces of the entire Washington garrison. Reinforcements are moving in rapidly and tomorrow the encirclement will be strengthened and extended. In the meantime, gentlemen, report the facts as they now stand in your papers. You will be given every assistance. But avoid spreading panic. We have no way of knowing who or what it is we are dealing with. The fear of the unknown is the greatest and most terrible fear of the human mind. Indiscretion on the part of the press at this time could precipitate a national crisis unparalleled in our history as a nation. Goodnight, my friends."

We filed out of his study.

WELL, human nature is human nature. Newspapers were intended to report news and that is what we did. By morning the facts in the case were known by the entire country-but the President's request had been completely ignored-as I had known it would be. American journalism stood four-square on sensationalism as the keynote of its life. Perhaps without this it the general melee that followed, American press did not bother to find out the answer to this academic question.

They embroidered the facts, they gilded a thousand lilies, they pointed with fear and viewed with alarm. The opposition to the government demanded immediate action, while the pro-government section of the press defended the conservative attitude. In the general melee that followed, American public opinion was whipped to a screaming froth.

On top of the invasion of Washington
came the news of the sudden appearance off the port of Shanghai of another of the red discs with its accompanying freight of men and machines pouring-to earth from nowhere. In the uproar that followed this disclosure, public perspective was completely distorted. If panic and alarm had existed widespread before this, a stark, cold fear gripped the imagination of the entire world now.

Within a month national differences were buried. The Peace Conference hurriedly concluded its business, settled every point on the agenda amicably and with remarkable speed and gave way immediately to a Supreme Council which took over control of the planet temporarily. Due to the fact that the weapons originally used by the Invaders seemed powerful in the extreme, the experts called in to deliberate the case advocated an immediate expansion of armaments. This could be done, they declared, with no change in the existing world economy, since due to the recent conflict, each nation had been economically adjusted to the situation, producing guns, not butter. This state of affairs was merely to be continued for a while, until either the danger was destroyed or abated.

The waiting world received the news with jubilation. At last something was to be done against the mysterious and unknown horror. Gleefully, the masses of the planet again girded on the armol of war and tightened their belts. Production of heavy guns, tanks, airplanes, bombs and all other instruments of warfare rose abruptly to a peak. The planet resounded to the roar and rumble of factories pouring out potential death and destruction by the million-ton lot. In five months' time the whole world was armed to the teeth. The principal cities had been ringed with immense steel and concrete forts and everyone from the oldest grandparent to the child able to walk carried side arms and rifles.

PERHAPS Barry Shawn was not the only person in the world who discerned one singular fact from the chaos that closed over the world. Thousands of fine minds must have weighed the problem from every angle, but any such voices, had they existed, were drowned in the giant clamor that rose, shrieking to the heavens, burying all opposition to the program of universal and total armament that engulfed the world.

The singular fact, a fact that Shawn kept
repeating to me constantly was that the Invaders, aside from the initial flurry of resistance, had from then on displayed no further signs of military opposition, though it was still impossible to gain a picture of precisely what they were doing as the original mist of disintegration that had enveloped Washington and-naturally-and sub. sequently, Shanghai, had failed to dissipate and still hung dismal and impenetrable over both capitals.

Shawn's brain was fascinated by the spectacle of the invasion. He had always been a romantic sort of chap, given to wild flights of fancy and the concrete appearance from out of nothing of a tremendous and ob. viously completely alien science had crystallized in his mind a determination to get at the root of the thing. The curiosity gnaw. ing at him finally became too strong to stand. He confessed his intentions.
"You're stark crazy," : jibed as we sat in the Times-Telegraph office and watched the mists worry past outside, "Nothing could get near that red disc and live."
"No one's tried," he replied calmly. "We don't know if the damu thing is dangerous, harmful or even significant. I'm going to try to find out. If those little men can get through from some space beyond, what's to prevent me from flying a high-powered bomber into their 'world' whatever, wherever it is?"
"Nothing," I grunted in reply. "Go ahead, flatten yourself like a lump of butter on that pancake. See if I care."

He went, chuckling. I was worried, but it was too late to do anything. No word of mine could have altered his course of action.

I got the story of his disappearance later, from the commander of the forts that defended the city from the north, some distance south of the extreme limits of the misty area. He'd commandeered a bomber, pleading a desire to photograph the disc which shone faintly through the vapour, from the air. Once aloft, Barry had forced the pilot to jump, at the point of a pistol.

The officer shuddered as he described how the bomber veered sharply away from the descending parachute, swung outward into a wide arc, gettiìg into position and then dove straight for the flat surface of the sullenly glowing disc.
Shawn did not crash as the ship struck the strange thing from "outside." There was simply a sudden cessation of noise as
the propeller and engine vanished into nothingness. Then the rest of the plane followed and it was stated that the plane had completely disappeared.
I sent telegrams to the family.
Several days later, the door of the almost deserted Times-Telegraph city office burst open with a familiar crash. I jumped to my feet, drawing the heavy service pistol which I habitually carried and whirled around.

It was Barry.

HE WAS neither worn nor haggard nor did he show any evidence of needing a shave. Instead his chubby face beamed the usual good humor and love of life. He strode up to me, slapped me on the back and pushed a bound manuscript of several pages into my hand.
"This'll explain everything," he said, very simply and then turned on his heel and walked out. "I'm going back," he shouted over his shoulder.
The following morning the Black Invasion was over. The disc vanished following the beginning of a terrible commotion beneath the deepest sections of the misted areas. A terrible explosion rocked hundreds of nearby buildings and set in motion a minor tornado that nearly ruined the Capitol Building itself.

The next morning, the clearing mists disclosed the decampment of the Invaders. They had gone back to whatever hell from which they had come, leaving behind the filled-ir remains of a gigantic hole never since completely plumbed and a dreadful odor of burned flesh and fish. For weeks after, sea water bubbled up from the soft, loamy ground with which the enormous hole had been filled.

Simultaneously with the disappearance of the Washington camp, the disc and Invaders over Shanghai vanished. The same hole, smells and burned appearance remained.

The war was over. Humanity, released from its eighteen-month tension, went mad with joy but the fervo of rejoicing scon died when somebody began estimating the cost of the gigantic and perfectly useless armaments with which the planet had been gircoled.

NO ONE ever saw Barry Shawn again. The paper he handed me contained a letter explaining what he had discovered in the world "beyond" briefly and a large
sheaf of blueprints and drawings, all of a highly technical nature.

In accordance with his wishes, expressed at the end of his personal letter to me, the letter and blueprints were placed with the War Department archives with the stipulation that they were to be opened only after twenty years. After an investigation and secret consultation, one hundred scientific experts advised that Shawn's advice be followed. The world was not ready for the benefits which lay ready in the blueprints.

YOU ARE all of course familiar with the letter which begins:

Dear Jerry:
I told you there was nothing to worry about. Behind that red disc is our own world-our world, but almost a million years in the future. The little four-foot figures clad in black armor are what humanity of that day is like. They are our own descendants.

They were very kind to me when I blundered through that disc which they call "The Door to the Past" in the bomber. I smashed up a lot of delicate machinery and hurt some of them. I got hurt myselfwent unconscious and awoke in one of their hospitals. Communication was difficult at first-they were in the strange position of fully developed men talking to an apethat's me. Finally they had to bring in a whole slew of complicated machinery and educated me nearer their own level. My head is still aching with the awful weight of knowledge I acquired that time.

Now, hold on to your hat, son, because I'm going to blow a bombshell under you. When I explained the situation at home, they were profoundly puzzled at first, then seemed to see something tremendously humorous about the whole thing. Finally they explained. And here's what they told me, in essence. There is no invasion-at least not of us. The little black-clad men are not interested in us in the slightest and wouldn't harm us if they could. To harm us is to harm themselves, because they are our future descendants.

They came back to our time and space to forestall the destruction of the humanity of a million years ahead. They are highly developed in all ways, but especially so in the matter of time travel. The little men habitually explore the "regions" of time. Some period back (some hundreds of thousands
of years abead for us) one of their experts detected beneath Earth's seas the existence of another greatly developed culture which was basically inimical to surface life and preparing to exterminate it with horrible weapons of a power and size beyond even the destructiveness of the disintegrating rays we saw them use back in our own time. The scientists of the race were at a loss for some time as to what to do about the situation. Certain death faced them all, a death which their science had no direct power to contravene.

At last they decided on a bold stroke. They decided to return to the .past, exploring the history of the undersea race as they went and attempt to exterminate it at its source.

The source in this case happens to be the seacoasts near W'ashington and Shanghai where the early and remote ancestors of the future oceanic race were already on the road to the development of a tremendous, though evil brain power.

So the "Invaders" came. They dug a gigantic hole in Anacostia leading to the section of the ocean bed where the primitives lived and managed to destroy them utterly by raising the temperature of the ocean. They did the same off Shanghai.

The little men were on the point of leav-
ing when I arrived. They were very decent to me as I said and I've decided to stay with them for a while more. I can always get back by using the "Door to the Past."

The blueprints inclosed with this packet will enable our scientists to abolish a lot of trouble for the human race. But the men of the future warned me that they should not be brought into public use too soon. Bury these papers for at least twenty years, son. For safety's sake, give them to the War Department. In any case, they can make us invincible against attack.

I'll be seaing you.

> With much affection, Barry.

I gave the precious papers to the proper authorities.

Barry, of course, never returned. Perhaps he didn't want to. Perhaps the world of that far distant future is a better world than our own. Well, I'm satisfied.

I did check up on one point, however, before I believed the story conclusively. The meteorological bureau confirmed Shawn's story of the heating of the ocean off Washington. It was merely a fact that had gotten lost in the general chaos.

And Washington sure was hot that sum. mer. Hot and sticky.

## CASH FOR LAPSED INSURANCE <br>  <br> The weekly-payment policies that you consider worfinless, or without cash value, may be worth considerable money right now-regardless of what the policies state. <br> MILLIONS OF DOLLARS have been recovered through our service on policies that stated there was no cash value. For special reasons, hundreds of thousands of people are now entitled to cash. Regardless of what anyone may have told you-no matter how long since you paid premiums-you, too, may receive cash for your policies. It costs yous nothing to find out, and may mean immediate cash for you. <br> Tens of thousands of families have already recovered cash under our service. The amounts range from small sums to many hundreds of dollars for each family. The policies all provided that there was no cash value. If vour lapsed policies are in a large insurance company, you have an excellent chance of receiving immediate cash. All money will be sent you direct by the Insurance Co. <br> NO COST OR OBLIGATION unless yon redive cash Juse fil ut and mail this fiterm tion Form. The sooner

| Name of Inswrance Co. | Folicy Number | Present <br> Person <br> insured | Numberof YearspremiunsPaid | CHECK KIND OF POLICY |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Ordinary or Wholelite | $\begin{gathered} 20 . \mathrm{c}_{2} \\ \text { Life } \end{gathered}$ | Endowment |
| 1. |  |  |  | $\square$ |  |  |
| 2. |  |  |  |  |  |  |
| 3. |  |  |  | $\square$ | $\square$ | - |

## List Additional Policies on a Separate Shret of Paper

NATIONAL REFUND COHPANAditionat Policies on a Separate Sheat of Paper 9 W. WASHINGTON ST., CHICAGO, ILL.-You are to inform me as to such of the abovepolicies that you select for your scrvice. I am to pay you nothing and I will be under no obligation whatsoever unlay
 and agree that I will promply pay you a serviee fee of one-fourth (1/4) of the amouncs received.'
Name. Address.
City.

## TWO-WAY TIME

Oh, but it was a lovely tangle: they discovered a message which had been buried in a wall for hundreds of years-and found it was addressed to themselves in their own handwriting. They hadn't tried out the time machine as yet at this point. And matters didn't become any clearer when experiment showed that their contraption went backward and forward in time simultaneously!

# by ALBERT A. GILMOUR 

Illustration by John Forte.

## CHAPTER I

ALYNE FURNER'S eyes were blazing as she faced me across the work bench in the Physics Laboratory.
"If this is a joke, Bill Kenton," she burst out scathingly, "it's in mighty poor taste!"
"But Alyne," I protested, "this parchment is as much a mystery to me as it is to anyone here."
Exasperated, I turned to Dr. Furner: "I hope you've drawn some conclusion about this?"

Before he could answer Arthur Spurrins interrupted, "Now don't try to palm it off as a forgery. I'd know those Italian curlicues of yours anywhere."

I ignored Spurrins. He was the assistant professor of Physics along with me under Dr. Furner, the department head. He hated me when the old man took to thrusting more and more work my way and he seized every opportunity to take a crack at my assertion that Leonardo Da Vinci was the father of scientific research. But Spurrins never had the spunk to throw five fingers at my chin. I wish he had the time he started to mess around with Alyne. She and I fight every other night. But we make it up plus on the inbetween nights. And we don't like interference.

As I said we were in the Physics Laboratory. Not the general one on the first floor but Dr. Furner's private lab in the basement. He had his own dynamo down there and an ordered row of wall racks crammed with test tubes. For three months
he had kept us out of his private diggings -even interrupted Spurrins' set up on the new nerve gas. In that period he had completed a time machine based on the mag. netic force of the Alpha rays of Radium. He imprisoned them between two spherical shells revolving in opposite directions. This two-way curved force acting on the magnetic energy of the Radium and further augmented by a tremendous electric potential was sufficient to leap the barriers of Time. But the most amazing thing about it was this:

The machine went backward and forward in time simultaneously!

He had theorized mathematically before he started. "You see,' he explained, "Time is not merely a matter of duration along a straight line; or even along one line. Time is curved and proceeds in an infinite series of curves which intersect in an infinite number of points. If this hypothesis is correct past and future lose their significance and become merely a selected series of intersections. Is that quite clear?"

Spurrins said, "Of course, Doctor."
Me, I'm honest! I told him I was just a plain, garden variety Physics man. When it came to Metaphysics I'd take spinach. Anyhow, I got the idea that the machine could carry a man into the future and into the past as well, and do it, so far as I was aware, at the same time.
"You mean a fellow could talk to somebody in the past and in the future at the same instant?" I asked.

The Doctor's eyebrows drew together. "Yes," he said, "and they could see and talk

"I cursed bitterly when it went through him as if he were thin uir: I had missed him by about nine hundred years."
to you. Naturally, they couldn't see each other."
"It's so obvious," Spurrins gestured disdainfully in my direction, "duality would necessarily be confined to the individual in the machine."
"Sure, sure," I sighed wearily, "it's a shame a bird as smart as you didn't think this up himself."

DR. FURNER received the package which caused all the discussion on Faculty Meeting Day. He immediately called Alyne, Spurrins and me down to the basement and laid a strong, metal box on the work bench. From it he lifted a sheaf of incredibly old, weather-stained, parch-ment-like material. The sheets were strongly bound and littered with seals. On the front page in what was unmistakably my own handwriting was the inscription, 'To Dr. Decius Furner from Alyne Furner and William Kenton concerning Arthur Spurrins.' I had also written, 'Not to be opened until 12:45 P. M., February 10, 1941,' and double underlined it.

It was an innocuous enough afpearing bundle that wouldn't ordinarily have disconcerted me--except that I had never seen it before in my life.
"Where did you get it?" I asked.
"It came in the mail this morning," Dr. Furner replied in his usual calm tones, "along with a letter from the Milan Historical Society. They said they had discovered it in a crypt in the ruins of the old Sforzia palace and that presumably it had been placed there many years previously. They can't understand how because no one knew of the existence of the crypt until it opened of its own accord two weeks ago. I understand the panel slid back and exposed a peculiar reedlike device. This apparatus shrilled a musical overtone which attracted passers by at once."

Alyne cooled down a little when she saw my obvious perplexity at this startling announcement. But she couldn't resist a parting shot:-
"Come on, little man," she purred, "let's get a good look at the machine. You know a lot less about that than you pretend to know about those papers. This may be the day but it's only twelve o'clock. Your orders are to open them at twelve forty-five. And your word," she curtsied in mock humility, "is my law."

I had parked on the wide ledge which
each of the iron-barred, laboratory windows boasted. The sun's rays fell obliquely down through the surface grate. They warmed my back while I fiddled with the shade cord.
"Let me get this straight," I insisted. "This spherical job not only traverses time but space as well?"

Dr. Furner nodded, "That is true. It is merely a matter of concentrating the electronic energy in a position opposite the direction you wish to proceed.'
"Oh, I see. Concentrating the energy in the back forces the sphere forward. Or you gather the electrons at the bottom in order to rise."
"Nimble comprehension, Bill," the Doctor's shaggy eyebrows arched quizzically.
"You use a magnet to bunch the electrons, 1 suppose?"
"Correct, and further, it is possible to vary the intensity of the magnetic force to control your speed. I've labeled the magnet's directional gauges."
"Uh huh. But, how in time's name, are you going to move that machine through a four-foot wall?"
"My boy!" The eyebrows expressed genuine concern. "Don't you remember jour H. G. Wells? Those walls haven't always been there. Nor will they always be there. It is necessary only to move in time to a point before the walls have been built and after they have been demolished. You simply outdate them!"

WE TROOPED over and climbed inside the small opening in the tenfoot sphere. Alyne first, I followed. Spurrins was just about to ut his head inside when he turned to Dr. Furner, "Your faculty meeting, Doctor," he reminded.

I hardly heard the answer because Alyne and I were studying the interior fittings of the machine. There were two chromium chairs upholstered in blue leather and a small table fitted out with an instrument panel. Besides the altimeter and the directional gauges we saw a long, glass-enclosed, horizontal slot with a zero position in the center on which a double indicator rested. On either side, the slot was marked off in millimeters. Below the indicator was a dialed knob which twirled easily at my touch.
"Let me try?" Spurrins' nasal whine sounded at my elbow. He forced himself between Alyne and me, turned the knob
and set the indicators about ninety degrees apart.
"Hold on a minute!" I barked. The big twerp was jamming the gauge. Instead of apologizing he pushed me back and stepped toward the opening. He snapped a fuming retort from under his coat while, with the other hand, he covered his nostrils with a handkerchief.
"Nerve gas! Kenton," he snarled, "and while you're getting over its effects you'll be out of my life. I'm going to send you two off in time."
"That's what you th-i-n-k!" What's the matter with my tongue, I wondered dully? It seemed thick and unwieldy.

Spurrins was leering: "When Furner was working on the plans for this I secretly copied his blue prints. I know almost as much about the machine as he does. Enough even to defer to your wishes. I jammed the controls at a point where you can meet your admired scientist Da Vinci." He laughed mockingly, "And you're never coming back!'

I leaped to give him a taste of my own kind of nerve quietus. That leap just about brought me to my knees. Out of the corner of my eye I could see Alyne transfixed over the dial, utterly motionless. I couldn't roll my eyes. The oculo-motor muscles were paralyzed.......!
"Fighting man, eh!" Spurrins gloated. "How does it feel to look on helplessly while somebody else gets his way? You interfered in the work Dr. Furner should, by rights, give to me. You stole Alyne away from me. This time, my overbearing friend, I'm having my way."

He stoppered the retort. I realized then it had been left from his interrupted experiment. . . . and that he had gotten Dr. Furner out of the basement by mentioning the faculty meeting. Despairingly, I watched the rat slither through the opening.

He clamped the electric switch while I struggled dizzily to my feet. I heard his triumphant voice penetrating the shell.... "And I'll say that you threw me out to steal the honor of the first time trip for yourself and Alyne. But you'll never come back! Goodby and adieu, my adventuresome friends."

A heavy buzzing from the swiftly revolving walls attacked my ears. Its pitch grew with rising frequency until my eardrums burned. I wavered shakily toward Alyne and then both of us stared fascinated
at the swirling opacity of the inner shell. It was becoming mistily translucent as its speed of revolution increased. Dimly, then as the whine died, more clearly, finally with perfect transparency;

W'e could see through the walls of the time machine.'

MY EYES seemed to have developed a case of double exposure. I could see Spurrins laughing maniacally while he crawled through mid air at the height of the sphere's opening; going backward as we rushed into the future and forward as we pierced the past. Dr. Furner was quitting the room. I saw myself sitting on the window ledge while Alyne curtsied. Dr. Furner suddenly burst through the door with a bunch of tattered parchment in his hands.

In a confused swirl the appearance of the room changed. All the people I had known there faded away. The test tubes on the wall disappeared and the dynamo. The place seemed to be filling with silt. A workman appeared and busied himself with what seemed to be dismantling the benches. He wore a leather apron over his denim overalls. I noticed he wore button shoes.
"How in the world," I exclaimed, "did he ever get hold of those things?"
"I'm not sure," came Alyne's awed voice at my side, "but I think he's building those benches!"
"What do you mean, building?" I snapped. "He's dismantling the place. And where did he ever pick up those shoes?"
"Bill, I think I've got it. This building was put up in 1905. And button shoes were quite common at that time. We're watching a man put the finishing touches on the laboratory!"
"1905!" I almost whispered the words. "Wonder whether the silt was there then?"
"I don't think so." Alyne was counting on her fingers. "I think that silt will get there in 1977 if we are going forward and backward at the same rate. The building will probably have been abandoned then.'

I shook my head and slumped into one of the chromium chairs. Alyne's rapid tense shifting was more confusing than an E. M. F. equation.

And still we stared, fascinated. The walls seemed to be built in a trice. They started to crumble even while they were being finished. The green of a forest burst into view and deer drank at a long forgotten
spring. At the same time a great city in the future was built; built most curiously of glass and metal. Airplanes changed to rocket ships while great trees faded away to small plants. It was like two moving picture films being passed over a proj ctor in reverse order.

Alyne, meantime, was fiddling with the controls and finally interrupted my avid watching.
"The time mechanism is wrecked," she stated flatly, "but I can maneuver the directional gauge."
"Where do you think we are in time?"
"I'd say we were nearing 1491 and 2391."

I took over the directional gauges myself. Now that my initial shock in Time Travel was subsiding I wanted to take Spurrins at his word and get to meet Leonardo Da Vinci. I wondered if the future held any scientist as versatile as this great figure from the past.

## CHAPTER II

HIGH OVER Italian Lombardy we sighted Milan, or rather, two Milans. One of them, a small, walled city with narrow, dirty streets except for the Piazza del Duomo which appeared to be laid with flat paving blocks. The other seemed to be a collection of huge, shining, conical towers. Their outlines were clear except where a wretched Medieval hovel intruded on and through the shiny surface of a metal tower. Here the $\epsilon$ dges were indistinct like a ghost photograph, blurred and shadowy-but distinctly dual.

Scooting cars sped over the polished, glass surface of the future city. One of them was racing toward a ramshackle Renaissance peasant cart. Its cumbersome, solid wood wheels turned protestingly in the wake of a philosophical mule. The driver dozed in his seat, all unaware of the impending danger.
'Look out!" I screeched and subsided foolishly.

For a split second there was a blur while the car neatly bisected the mule. Rather than fall in sections, however, the animal raised its lips to an overhanging window and munched reflectively on a house plant draped over the ledge. The car thundered away on its errand as if nothing had hap. pened.
"You sure you're all right?" Alyne asked.

I maneuvered the machine toward the central square and tried to concentrate on a motley group in the past who were intent on the construction of a huge cathedral.
"In case you're interested,"," I barked, "this business of trying to spread myself over nine hundred years is tough on the brain cells."

We hovered m‘mentarily over the cathedral, wafted slowly down. The antlike figures on the ground grew larger. A little apart from the rest a tall man with yellow hair appeared to be superintending the activities of the workmen.

Close beside him a man of the future peered into a sort of protected cubicle. He was, of course, utterly oblivious of Renaissance Milan. A gleaming conical helmet from which two antennaelike wires protruded covered his head. A steel jacket encased his chest. He was entirely motionless watching a screen which threw off gleams of light at intervals. And yet, as the sphere fell earthward, he gave me the impression of wrestling mightily against a superhuman force and that final victory or defeat was a matter of momentous consequence.

The sphere twirled to the ground as the automatic time control clicked to a stop. Directly the rotary motion of the walls ceased the interior darkened to an intense blackness. We heard a surprised scuflling. Then....
"Magic!" This single surprised exclamation was followed by a confused jargon of shouts, prayers and imprecations until, at length, the clamor subsided to an unearthly, menacing stillness.

Alyne and I stared into Stygian darkness.
C6 TOME, little man," she giggled nervously, "what are we waiting for?"
"I'm holding on to a whole skin as long as I can," I told her. "But here goes. Hold fast to the door in case I have to come back in a hurry."

She fumbled her way to the catch. It clicked open under her groping fingers. A brilliant beam of sunlight stabbed the interior. Intense brightness blinded me momentarily. Eventually I focused on two blended worlds.

Both of them froze into awed disbelief when I pushed my head through the opening. I scrambled over the valve lockwinced as a bolt from an unseen crossbow clanged hollowly against the sphere. An armed horseman, recovering from his first
shock, set his lance at point and galloped forward. A future man deliberately aimed a cylindrical object like a flashlipht at my temple. I had a premonition its only relation to light was its capacity to let it through my carcass.

The big yellow-haired fellow moved with swift stride in the path of the advancing horse. Its rider jerked it sack on its haunches. The two of them seemed to argue and come quickly to agreement. The mounted man drew a huge, two-handed sword from his scabbard and passed it down.

A future man's arm waved motioning me to descend.

There was a slight difference in the glass level of the future city and the paving block surface from the past. I managed it and addressed the blond fellow.
"Your pardon, messire," l began in my best Italian, "I am a wanderer in the womb of Time and I-" at this point the future man strode forward and slapped a steel cone on me.
"Do you understand me?" he asked.
"Certainly," I said, "you're speaking English."

A surprised expression crossed his face, then: "Take your helmet off."

I did and found he was talking unintelligible gibberish. I fitted the thing on my head again and once more he was understandable.
"Did you mention English?" he asked.
"Yes. What's this thing I'm wearing?"
"Strange," he mused, "you use a language that disappeared into limbo two hundred years ago.'

It dawned on me the cap was more than just a headpiece. It was a thought transferring machine as well.

While I puzzled over this he announced, "I'm Dravla, President of the Democratic city of Milan. Who are you and how are you arrived?"

HIS thought questions blended with the voice of the man of the Middle Ages. I could hear him even through the helmet.
"I am Lecnardo of the family of Da Vinci, at present, under the aegis of the Storzia. By what strange alchemy do you come here?"
"You're who!"
I stared long and intently at this broadshouldered, blond genius. Here, betore me, was the most versatile intellect in all history; artist, sculptor, physicist, anatomist,
inventor, philosopher, the supreme archetype of everything in human activity that made for advance into higher cultural levels. Somehow, I had expected tu meet a scholarly, old grey beard. This man was young, tough-aware of his strength. He swung his sword so the flat of the blade lay across his shoulder where he balanced it negligently with his left hand, as though he were leaning on the hilt.
"I guess it sounds funny for me to put it this way," I blurted, "but I'm from the twentieth century."
"You are decidedly from no part of Italy with which I am familiar," he smiled. "You use the language most curiously. I take it, this strange contrivance, like the chariot of Chronus, carries you through the years?"
"I wouldn't know about Chronus," I assured him, "but we certainly can span. . . . Say!" I stared at him in open-mouthed surprise-"the idea of traveling through time doesn't phase you a bit."
"The thought has often occurred to me," he grinned affably. "It is most interesting someone has actually stumbled on the secret."

Alyne clambered down beside me. "You're neglecting the future people," she complained, "but never mind. I'll try to explain things to them."
"Right!" I acknowledged. "This bird is simply amazing. He took the idea of the machine in stride; even wondered about it himself."

I saw her accept a helmet from one of the future people and promptly proceed to make herself at home. Da Vinci was already examining the machine while I explained as well as I could what made the thing tick. His agile mind immediately grasped the possibilities as soon as he got the hang of atomic structure and the relationship between mass, energy and time. We were getting along swimmingly when a future man strode up and grasped my arm with a grip like a Stillson wrench.
"Lay off, chum," I ordered. "Can't you see I'm busy?"

For an answer he uncorked a left uppercut that grazed my chin like the high pressure fringe of a tornado. In spite of this surprise attack I got my guard up in time to stop his right cross and then I stepped in fast with a left jab that snapped his head back. He waltzed away while ' took the offensive. The drip opened up at a left

## $52 \star \star \star$ Future Combined With Science Fiction

feint. I smiled happily and whizzed the old right into his midriff. Wham! Searing pain jittered all the way from my fist clear up to the shoulder. It was agonizing! I had forgotten all about his steel jacket.

THE fellow's face never changed expression. He came boring in a second time. The pain was so maddening I didn't even realize I was hooking my left again. I caught him right behind the ear and jounced his helmet off. And that just about did for me! Instead of a head of hair all the monkey had under his helmet was a maze of wires that spat angry, blue sparks. And that electrified apology for a man still kept coming in.

During the melee I caught a glimpse of grinning future men. They had gathered in a circle to watch the scrap. Scattered through the steel-clad throng the Renaissance people were staring in dazed bewilderment. Da Vinci surveyed me as though I were a thousand devils wrapped in one covering.

His mouth hung open in bewilderment. He had been talking to a supposedly rational human being who suddenly started shadow boxing in the middle of a technical explanation.

More to the point, his sword hung forgotten in his hand. Watching my opportunity I grabbed it and took a mighty swing at my mechanical antagonist.....and cursed bitterly when it went through him as though he were thin air. I had missed him by nine hundred years!

My surprise at the-sudden realization of how useless an article in the fifteenth century became when I attempted to employ it in the twenty-fourth gave the robot the advantage.

Before I knew it he had my arms pinioned behind me and was leading me to one of the conical towers. I meditated ruefully that the object lesson I had when a twen-ty-fourth century scooting car passed through a Renaissance mule was a wasted demonstration. The robot was shoving me through the entrance and I saw we were going down steps. I turned and shouted hastily to Da Vinci, "I forgot to tell you-I traveled into the future and back to your era at the same time. They're taking me itto one of the future buildings. Keep watching for me. I'll get back to the surface...." and then as far as he was concerned I disappeared into the ground.

## CHAPTER III

IDRAVLA WAS STANDING in the back of a huge chamber, his arms folded across his chest, his features impassive.
"William Kenton," he said gravely, "I have knowledge of your coming."

I glared at him, chin oatthrust, fingers working although my arms were still in the clutch of the metal-brained policeman.
"I suppose Alyne-Miss Furner-told you my name," I snapped.
"On the contrary, Miss Furner told me nothing whatever. She is also in custody."

I loked about me stupidly. I was in a huge circular chamber. There were no windows although the whole place glowed with a pale, yellow light. At intervals, around the perimeter, there were cleverly concealed entrances which opened to admit an ever increasing throng of future men. When I looked up there was no visible ceiling. It was like standing inside a huge, illuminated, hollow mountain. The pale flow concealed rather than revealed its upper stretches.

But no matter where I looked there was no Alyne. I had left her chatting calmly with Dravla. Now-she was gone! Something was wrong-very wrong. But, in the name of Time-what?

Dravla's voice again broke the stillness: "I have an indictment against you that has been ,preserved four hundred and fifty years."
"Four hundred and fifty years!" Even the spark brain relaxed his grip at this news. As for me, I could only gape.
"Yes! You falsely accused one, Arthur Spurrins, of locking you in a Time Machine. He was tried for the murder of both you and Alyne Furner. Finally he won his release because your bodies were never discovered. The anguish he endured was directly caused by a complaint delivered, in some mysterious fashion, to the Milan Historical Society who, in turn, forwarded it to Alyne Furner's father."

That confounded packet! When I saw it first on the work bench in the Doctor's laboratory I thought someone was playing a practical joke. This was fast getting beyond bounds. I stirred restlessly only to find the robot hanging on my neck like a rookie cop with his first crook.
"Decius Furner took court action," Dravla continued, "and Spurrins' defense was later made the basis of an indictment should
either you or Alyne Furner ever appear in the future time. His statement, briefly, describes a physical encounter between you and him in which you bested him. Then, in attempting to seize the glory of the first time trip, you thrust him from the machine and started off. Before that, with diabolical ingenuity, you had a statement prepared which accused him of a plot against yourselves."
"That's plain nonsense!" I shouted furiously, "I never made such a statement."

DRAVLA shrugged his shoulders. The lined features of his face assumed a sombre hue as he continued, "You will have an opportunity to make your defense. This city, in all the world, is the only spot in which law and order exists. All else is governinent by caprice, the whim of a dictator. We are the last remnant of Democ. racy."
"Democratic processes in the hands of robots!" I exclaimed incredulously.

At this there was a general stirring, whether of anger or amusement, I couldn't say. Dravla's face broadened to a grin.
"Our automatons," he smiled, "look exactly like ourselves. With the exception of the guards at the various doors, all of us are rational humans. The puppet I sent after you is designed to handle individuals who may resort to force....Mr. Spurrins has commented on your prowess with your fists," he remarked drily.
"What have you done to Alyne?"
"She is being held pending the outcome of your trial."

I paused to consider. Here was a devil of a fix! We were stranded in the future, pitted against a crazy counter charge to a complaint of mine I had never even heard of. How had this countercharge of Spurrins ever come through hundreds of years? How did I make an accusation in the first place? If they found us guilty what would they do to us? Questions chased themselves around in my brain like a dog chasing its tail. For the life of me I could find no answer.
"Do you mean to say," I asked, "that this one group is all that is left of Democracy? What happened to the Western Hemisphere? And how is it you are in Milan? This whole area was completely totalitarian."
"Let me remind you," Dravla replied patiently, "the world hasn't been standing still. Since you set forth in time the mass changes in population ordered by the dictators in

1939 have been repeated over and over again. All sorts of factors; treaty, decree, climate, economic conditions, all have contributed to innumerable shifts on the part of the peoples of earth. But always," here his voice fell sadly, "always the followers of Democracy have dwindled...."

A howling scream startled me out of my questioning. A man had sprung through the portal. "We're fools!" he gibbered. His eyes were wide, staring, unseeing. His arms flailed empty air as though he had lost all power to control his actions. A great, sobbing breath started him again. "All logic is against this muddling freedom!" He started to cry-"The state is all! For us there is no greater glory than to be its instrument!"

Dravia galvanized into instant action. "The televisor!" he shouted.
He cleared the open space before him in one great leap, rushed swiftly to the nearest exit and disappeared.

The effect on the other future men was paralyzing. They huddled into a stricken mass, scared out of their wits. I attempted to follow Dravla but they fought me every inch of the way. One middle-aged fellow put a hamlike fist against my chest.
"Hold it, man," he ordered, "this is something that can't be beaten."
"I've heard that before," I laughed; I pushed him aside and forced passage through the milling mob. By the time I reached the poor devil who had caused the original disturbance he had subsided into moaning hysteria. My helmet was buzzing with aching entreaties to go no farther. Even the mechanical policeman was motioning futilely for me to return.

UP THE steps I raced where an hour before the robot had led me in ig. nominious defeat. Emerging into the bright sunshine I hesitated a second trying to sight Dravla. The square was almost cleared of the future people. Evidently they had all gone into the conical tower to see what would happen when I had been dragged in. The Time Machine was still there. Someone had thoughtfully seen to its being roped off to shield it from souvenir hunters.
The Renaissance crowd gaped at my sudden appearance. Some of them fell on their knees and prayed. Others broke into flight. Some few stared at me but made no approach hostile or otherwise. I imag.
ine Da Vinci had explained things to them in terms they could understand, because the men working on the cathedral went on undisturbed. A middle aged, not overly clean woman offered me a handful of roasting chestnuts which she was hawking from the gutter.
I caught sight of Dravla covering the screen in the cubicle where I first saw him as the sphere had settled down on the city.
"What's it all about?" I demanded.
The charitable chestnut vendor watched me stand and apparently spout gibberish into space. She crossed herself and moved further along.
"The enemy's most potent weapon," Dravla answered grimly. He strapped and buckled the last fastening into place. "A crystal whose rays flash intermittently while their propaganda artists speak. Even through the televisor its hypnotic effect deprives men of all their reasoning powers. They listen-and every lying word becomes the truth."
"I saw you staring at it," I countered suspiciously.
"Yes, I am the only one who can withstand its power. Even so I must summon every bit of concentration I possess to fight it off. You know one out of five people can resist ordinary hypnotism. I seem to be the only one who can resist this."
"Were I like the foolish dolts of my time and place," came in musical Italian accents, "I would surely believe you the emissary of the Devil himself-with power to disappear into Hell by the simple expedient of walking into the ground."
"Da Vinci!" I exclaimed.
"You return quickly, my time faring friend."
"Yes, but," I nodded toward Dravla, "I'm in more trouble than a cage full of monkeys."

Da Vinci shrugged his big shoulders: "No doubt you are nodding at some individual in the future?"
"Can't you see Dravla beside me?" I demanded impatiently.
"Who are you talking to?" There was a look of enquiring interest in Dravla's hard bitten, deeply lined face.
"Gentlemen!" I said confusedly. The two of them were standing within arm's reach. It seemed impossible they could neither see or hear each other. "Dravla," I hastened to add, "this is Leonardo Da

Vinci whose reputation is certainly known to you.
"And Messire Da Vinci. Let me present Dravla, the leader of Democracy in the year 2091."

The two of them kowed courteously, supremely indifferent to the fact of their separation by nine hundred years.
"The future people are engaged in a conflict," I continued, talking to Da Vinci, "and they're having a tough time of it. It seems a flashing crystal hypnotizes everybody who is exposed to it. The enemy uses this weapon to talk their way to victory."
"Your problem depends on the quality of light for its solution." Da Vinci was alert to the essential point immediately.
"That's true," I nodded, "do you know anything about light?"

Da Vinci shrugged his shoulders deprecatingly: "I have some small reputation for my ability to depict it on canvas. . . . In my early years at Empoli I was wont to watch the sun's rays become discolored by the dew drops until, eventually, the sun overcame their impertinence by drying them up."
"Of course." I couldn't resist this opportunity to tell the great Da Vinci something he didn't know. "Here's the explanation. The sun's rays passed through the dew drops which acted as a sort of crystal themselves. They split the white sunlight into red, yellow and blue light. We call the principle diffraction."
"Of course!" Da Vinci smiled inscrutably.
"What did you say?" Dravla grasped my arm in a grip like a hammer vise. "Diffraction!"
"Yes-" I stared at each of them in turn, a little puzzled. Suddenly I realized what that Medieval wizard was driving at. "We could protect ourselves against that ray with crystals," I gasped, "something to break it up and its hypnotic effect with it!"

## CHAPTER IV

WITH A HURRIED farewell to the yellow-haired man of the past I hustled underground with Dravla. Along with a few assistants in the laboratories I fashioned three sets of prisms and set them into three helmets. They could be raised when not
in use and lowered as a protection when looking at the televisor.

They were effective. We tried them and I listened to the drek that came pouring over the radio from the encircling enemy. Shielded against that insidious gleam I watched the huge blobs of overfed flesh that comprised their propaganda artists work themselves into a frenzy over their distorted ideology. The effect was sickening. It didn't seem possible that sane men would listen. The ray that made those fabrications convincing must have been powerful beyond belief.
The weeks following were busy ones. My peculiar position in time had been responsible for the idea that would lead to a sure defense against the enemy's most pctent weapon. So they gave me the job of organizing the production of the precious crystals.
I commandeered one of the huge underground vaults, set up glass furnaces, saw to the manufacture of molds, provided a great conveyor belt to anneal the crystals and then ran another set of belts along the length of a side room where the finished product could be checked. We were busy! Three shifts was the order of the day.
But with all my activity I still found time to learn more about the curious dual city of Milan. In the future time Dravla was my guide and mentor. I soon learned what a sterling guy he really was. Often I confided to Alyne that our double time trip had given us a twofold opportunity. We had made an effort to get in touch with the greatest man of the past. And, by the best of good fortune, we had not only managed that but had also become fast friends with one of the great men of the future. I admired Dravla and respected him. There can be no higher accolade in the relationships of human beings.

We got to be pretty clubby while he explained the many strange, scientific wonders I encountered daily. I soon discovered the future city was immune to attack by any kind of projectile. The whole metropclis was covered by a network of electric arcs which leaped from the apex of one conical building to another. These great arcs ionized the atoms in the air mixture and formed an impenetrable shell of force over the city. Along its outskirts the force field was directed down to cables carefully buried in the ground.

I took a hand too in the rehabilitation
of the man who had been exposed to the enemy's televisor gleam. He had received a terrific psychic shock from which recovvery had been slow and difficult. But he became an efficient foreman in my plant except for an occasional lapse into incomprehensible mutterings. At such times we allowed him to go for long walks. He always returned in better spirits.

NATURALLY, we had long since been released from any form of imprisonment although Dravla warned us that we would still have to stand trial.
"Why?" I asked.
"For one reason; yours is the only crime that has waited four hundred and fifty years for justice."
"What do you mean, crime?" Alyne demanded.
"You'll admit a man was tried for his life as a result of your activities."
"It seems to me that what is happening is the result of Spurrins' activities," I broke in. "Besides, how did his countercharge ever survive four and a half centuries?"

Dravla became serious and a little proud. "I suppose it was the ingrained respect for law that is part and parcel of Democratic people everywhere. Your case got particular care because the udges of your time realized that, while they would be long dead when you arrived in the future, the whole business would be as fresh in your minds as if it had happened yesterday."

I nodded and turned into the annealing room. The men were working busily despite their foreman's absence.

I smiled with satisfaction and shouted out to Dravla, "Tome-row there will be a million and a half helmets ready for distribution. The entire population will be supplied in three more months."

Dravla grinned back understandingly: "You're proud as a peacock over your first production lot. And you've a right to be. Tomorrow will see us released from our isolation." His eyes glowed with almost missionary fervor as he strode toward me, "With this defense we'll be able to equip even the deluded men under the dictator's power." He gripped my shoulder, "Kenton," he said warmly, "Democracy is once more. . . ."

His words were blasted out of his mouth with the shrieking scream of a siren. . . .
"Great God!" he shouted, "we're being attacked!"

Both of us rushed to the outer corridor leading to the surface. There was no time to grab a crystal. All hell seemed to have broken loose. Men were running along with us, hastily arming themselves as they went. We were balked at the steps. Two robots were attempting to descend. They were half dragging, half carrying the limp, weakly protesting figure of the foreman.

The ranking robot saluted when his sensory mechanism reacted to Dravla's pres-ence:-
"This man is responsible, Sir. We discovered him in the act of short circuiting the outer ground cable.'

Dravla glared at the prostrate figure. He had the military power to order this man's death for treason. I thought for a moment he would. But Dravla was made of greater stuff.
"Send him to the Psychopathic Ward for observation," he ordered briefly. "What was the extent of the damage?"
"The ceiling wall is untouched, Sir. But along the ground cable there is a hole big enough for the entrance of an infantry column. It is the general opinion this man has been in contact with the enemy and that they were prepared to attack when he opened the defenses."

WE WERE half way up the steps as Dravla called back, "Ask the medical men to question him to see if he has been up to any further deviltry."

I loosened my ray gun in its holster and broke through to the surface.

Men in dull, green uniforms swarmed over the future city.

I saw them snaking through the streets, taking shelter back of buildings, walking right through the Renaissance structures. The protective ceiling prevented bombing operations or aerial conflict. The narrow entrance in the defense wall precluded any kind of attack except infantry. Our fight resolved itself into a vicious hand-to-hand battle. The stinging spat-spat of lethal ray guns stabbed the streets with telling effect. Hastily emplaced disintegrator guns turned everything in their path to dust. Worse still, a picked group of enemy engineers was lugging in television equipment and setting up screens in every nook where space permitted. As soon as the apparatus was put in working order an avalanche of harsh, gutteral thoughts caromed through to our helmet antennae. The piercing lights from
the screens were infinitely more deachy than the greatest concentration of proton explosives the enemy could amass. Our men heard, glanced. . . . and turned to fight their comrades who had not yet succumbed to the insidious, hypnotic effect of the light beams.

I'd been having a pretty time of it. It was startling to aim through some law abiding burgher in the Renaissance and catch an enemy officer full in the chest with a paralysis ray. The good man in the past, seeing me aim and press what to him was a nonexistent trigger, would hake his head mournfully. Right back of him a future of ficer would clutch convulsively at his chest and fall rigid, entirely out of the running for the time being.

I took position back of a Renaissance statue and sighted on an engineering party. They were so intent on their televisor screen they never even saw me. Their heads drew together and I took careful aim. This would give me five at one crack. Carefully, my fingers tightened on the gun. One of them looked up with a startled yelp. He thrust the screen in front of him just as I let him have it. An empty click from the exhausted gun was the only result.

I ducked back of the statue for protection but the green clad man walked right through it. He thrust the screen squarely in my face and the searching beam caught me full in the eyes.

AHEROIC figure appeared on the screen and commenced to talk the language of reason. He hammered home each point with pure logic as he pointed out the weakness of the method I stood for. He itemized the loss of time attendant on debate. He proved a dependable leader could solve those problems. And I would be free to carry out his orders. There would be no lingering doubts in my mind. I could do my job without bothering to think.

I nodded frantic agreement. Why hadn't I come to this conclusion myself? Why hadn't all this been presented to me before? The gleam flicked forward again and drew my eyes into painful focus. Who was responsible for putting me off the track, I wondered? Why, Dravla, of course! With his silly twaddle about the glorious processes of Democracy! He'd never get the chance to pull the wool over my eyes again! I'd mop him up! Man to man! In a good clean fight! I'd kill him with my bare hands.

There he was now! Kill him! Killing was too good for him! One blast from a disintegrator and he'd be done! Smear him off the face of the earth! Even that was more than he deserved. Alyne was coming into my field of vision too. Her face was waxen with horror. I didn't wonder! She'd be exultant when she saw me pulverize the scheming swindler. I grasped an abandoned disintegrator and drew a bead on him. I couldn't miss! My gripping paws clutched the release valve when the lightning struck. Blackness enfolded me as I slumped forward.

## CHAPTER V

THEY TELL ME the attack was beaten off and the city saved. That, through the medium of the crystals, men all over the world were again thinking for themselves. That the power of the dictators was waning and Democracy's star was once more in the ascendant. I'll have to take their word for it. I spent those months in the hospital.

When I came to for the first time I was stirring restlessly on a cot. Quick, dizzying blasts of pain were shooting through my skull. Returning consciousness brought the sensation of coolness. Coolness descending in a refreshing wave on my forehead. It was Alyne's palm and Alyne's voice that whispered, "Bill, darling!"
"Dravla!" I muttered hoarsely, "Where is he? Oh, God, I've silled him!'"
"Never mind thinking about it. You must sleep," she insisted.
"But the ray......" my voice was agon-ized-tortured. . . .
"You mean the ray gun, don't you? When you tried to kill Dravla I clunked you on the head with it to save his life."
"My little clinging vine!" I sighed and contentedly mumbled myself back to sleep.

I had recovered completely the next time I saw Dravla. He came toward me with a quizzical expression. And I-well-it was all I could do to face him. You can't meet a man for the first time after you have tried to blast him to dust and say, "Shucks, fella, I'm sorry." I compromised and didn't say anything as he came steadily toward me. Then he smiled. I breathed a relieved grin and our hands locked in a firm grip. We never mentioned the incident after that.
"By the way, Kenton," he said casually, "we've got to get this trial of yours over
with. Under the circumstances, I think a formal statement will be enough. Do you think Alyne and you could get over to the Central Conic Building in half an hour?"'

So it was that once again I was in the huge, underground chamber. Once more the great vault was filled with future men. A couple of robots rolled a machine with a flat, mirrorlike surface in front of me as I started my story. I noticed with each sound I uttered a wavy, undulating line of green light passed over the face of the mirror. I watched it curiously for a time and then forgot about it as I warmed to my defense. I told them about Spurrins and the trick he employed to imprison Alyne and me in the Time Machine. I recounted my services to the future people and called on them to judge whether or no I was a criminal. As I finished my statement I noticed the waving line of light obediently following my voice, quivering when my tones were high, rounding into sine curves when the words were evenly delivered.

The robots returned and wheeled the machine away. Another lifted two thick packets from its interior. I stared at them inquiringly.

One of the robots, reacting to my unspoken question, handed over the second packet.

This came from the mechanical stenog. rapher," he said with a note of pride in his flat, mechanical voice. "The sound energy in your voice tones is transmitted by light to an electrical relay. The relay activates a set of type bars which imprints symbols on parchment. We were ordered to make this duplicate copy for you. It is printed in English."

IAZEDLY, I took it from him and read my story, word for word, as I delivered it.

When I had finished, the deliberating body, called together to hear my case, had decided the complaint against me was fraudulent. Spurrins' miserable sham met the contempt it deserved.
"Now," I turned the packet over to Alyne and smiled, "when we get the Time Machine fixed we'll take this along and show it to your father."

Alyne shook her head: "Have you ever considered what would happen if we did try to go back?"
"Not particularly. What are you driving at?"
"We'd be going forward too, Bill." "Well?"
"Don't you see?" she said slowly. "We would return to our original starting point in time. And then our story would happen all over again. We couldn't just step out of the machine and into my father's lab. oratory. Spurrins would start us off just as if we had never ge $e$ through what has happened to us." She half smiled as she quoted:
"'The moving finger writes; and having writ,
" 'Moves on; nor all thy Piety nor Wit
" 'Shall lure it back to cancel half a Line,
" Nor all thy Tears wash out a Word of it.' "
I stared at her in amazement! My little clinging vine! Going poetical on me! And yet I had to admit that she and Omar Khayyam, the Old Tentmaker, had the goods.
"Gosh!" I was forced to agree. "We’d be like squirrels chasing around in a cage if we ever started on the road back. Once we got to our original starting point we'd repeat everything until we came to the place where we would again go back to scratch. And the whole business would be repeated over and over again in endless cycles." It wasn't a pleasant prospect!

I hastily thanked the future men for their decision in our favor and decided to go to the surface to explain our predicament to Da Vinci.

Once on the ground level I had no trouble locating him. He was still engrossed in the cathedral, supervising the finishing touches to the elaborate carving on the great lintels over the entrance.

The future people waved genially as I crossed the broad Piazza. Not so those in the Renaissance. The story had gone around from the ones who had witnessed my activities the day the enemy attacked. They couldn't understand what had happened. So, of course, I was crazy; leaping around the square, hiding behind statues, and that wild stcry of having come from the twentieth century! I didn't blame them at that. Their solution was certainly more convenient than the real thing.

Da Vinci, however, was his usual affable self. And, as usual, able to get to the core of the problem with a shrug of his shoulders.
"This packet now," he suggested, "suppose you copy it on parchment I will provide.'
"All right," I agreed, "and then what?"
"You must decide whether you want to live in the year 1491 or in the distant future."
"Well, if I chose the Renaissance it wouldn't be long before these drips would have me chained in a dungeon for sorcery or boiled in oil for being the biggest liar in History."

Da Vinci nodded: "They are dolts. I don't dare divulge everything I think. I've written a few nutes. Perhaps, in the generations to come...."
"They'll be discovered," I assured him. "You'll be appreciated in your own time, too. But your notes will be a source of inspiration to people for hundreds of years."

HE SIGHED with satisfaction: "Now suppose you start to copy this amazing story. Then, when you have completed it, add the fact that you are going to destroy the inner shell of your Time Machine."
"Why?"
"I think the machine is responsible for your dual position in Time. By destroying either one shell or the other you will wipe out the energy that holds you in either your past or your future."

I remembered the two shells that went into the construction of the Time Machine, The inner one, I recalled, revolved in a counter clockwise direction. Perhaps this genius was right. Anyhow it was worth a try.
"And I," Da Vinci continued, "will build a time lock in a concealed cry ${ }_{j} t$ in the Sforzia palace where I will place your manuscript. I'll also install an alarm which will attract people to the spot when the time lock opens-in four centuries and a half."
"Good," I agreed. "I'll write it off at once."

The last seal was on the page when I decided to address the parchment to Alyne's father. I seized a blank sheet and scrawled across the page, 'To Dr. Decius Furner from Alyne Furner and William Kenton concerning Arthur Spurrins.'

And then comprehension came!
The packet was identical in form with the one Dr. Furner had received the day we set off in time!
(Continued On Page 65)


They hung helplessly in the grasp of the fibrous tentacleas
Illustration by Damon Knight.

# OLD MAN MARS by R. R. WINTERBOTHAM 

(Author of "The Fourth Dynasty," "The Thought-Feeders," etc.)
The creature was the grand-daddy of all living creatures-or so it said. And it had its own ideas as to what was best for its dear children.

THE CRAFT which sped through interplanetary space was a long hollow tube. Amidships were atom smashing engines, driven by radium, which pushed the big tube through one million miles of space a day. Fuel tanks, water ballast for shifting the center of gravity,
machinery for making a complete record of the flight and a man of the fifteen-hundredth millennium were tucked away inside the machine.

The man was tall. A handsome Koran and something more. In his veins flowed the blood of Victor Hansen and Georgiana

Jonson, Twentieth Century humans who had slept into the golden age of the Fourth Dynasty of life. A remarkable process of suspended animation had left them young and they had lived a full life in a world many millennia after their appointed time.

Space Pilot Vik Ansa's body scales glinted in the reflected light of the sun like bangles on a lady's handbag. The spaceman's high forehead was crowned with luxuriant hair. He had eyes and a supersensitive skin, like all members of the Koran race, but the eyes were startlingly keen, not decadent as were those of many Korans. In all, Vik Ansa was both lithely handsome and fascinatingly ferocious.

His keen eyes focussed on the dazzling whiteness of Venus, marching in clouddraped splendor to a point ahead of the plummeting spaceship. Vik Ansa carried authority from the Koran states of the north to claim all land discovered on Venus and on Mars.
Breathlessly he watched the course of the ship. It was man's first trip beyond the moon. It was a fateful day in the history of the race of super-men who now populated the globe. Nothing must come between Vik Ansa and a successful completion of his voyage.

So complete and so deep was his concentration that he stood for eighteen hours scarcely moving a muscle, his eyes riveted ahead. His tongue grew thick with thirst and his belly ached from hunger, but he did not stir. Yet, within arm's reach behind him was a leg of porboet, half pork and half beef, a creature developed through astonishing manipulation of genes and chromosomes in herds of swine and cattle during the thousandth millennium.

His lips moved and he spoke: "You are hungry, Vik Ansa; you are thirsty. You must eat nd drink. iear your eyes from Venus for a moment."

The persuasion of his body wants won at length over his mental concentration. But it was a half-hearted victory. Vik's body did not turn, nor did his eyes move from the planet ahead. His arm snaked out behind him toward the table. His fingers touched the plate and felt for the bone. But the porboef had vanished.
"By the patrons of Xubra!" roared the Earthman as he swung his eyes from the porthole for the first time in eighteen hours. His sensitive skin attuned itself to the surroundings of the control cabin. He saw the
table but the plates were empty. Something had entered that room and stolen a meal.

At first there appeared no explanation. The craft had been as sterile of rats and other scavengers of the spaceways as a surgeon's scalpel is of microbes. But Vik's keen eyes detected a small green thread fluttering from a corner or the table. The thing that had devoured his meal had worn clothes.

Slowly his eyes followed the trail. Here and there the thin layer of dust on the floor had been disturbed. His eyes traveled backward to a storage locker. A small strap protruded from behind the door. Vik's eyes narrowed and his lips compressed to a firm, savage line.

In a single leap he had cleared the space between himself and the locker. His long fingers jerked open the doar and his right hand clutched something that huddled in the corner.

There was a howl of rage and the huddled thing sprang toward him, kicking, biting and clawing. Almost, but not quite, was Vik swept of, his feet. Then his left arm swung in a short jabbing arc and his closed fist caught his assailant square on the side of the jaw. The scream choked off in a groan and the stowaway slid slowly to the floor.

$V^{1}$IK'S EYES caught the glint of Koran scales on the stowaway's body-it was a Koran, not a hated Xubran. But the eyes and hair on the creature's head told him more-it was not a Koran of the north, but a member of the primitive race that dwelt on the Mexican peninsula to the south. And the stowaway was a woman.

She shook her head to clear her brain. "You're no gentleman!" she blurted. "Striking a lady! And I thought space pilots had manners."
"On passenger rockets to the moon, perhaps they have manners," said Vik. "But this is no pleasure jaunt. It is a government mission, a secret mission and no passengers are wanted. What's your name?"
"Rona. Rona Olli." She moved her fingers downward. But Vik caught the movement in time. He spotted the grip of a neutron pistol and his hard flashed down and removed it. Witt her weapon gone, Rona used her next best-a lovely smile that sent the blood churning in his Koran veins.
"And why were you hidden aboard this
ship?" he demanded. His question came more to cover his confusion than anything else. That she was a southern Koran explained practically all. The Korans of Imexi, the Mexican peninsula, were the sole threat to the northern supremacy of the spaceways.
"Have you checked your course recently, Vik Ansa?" she asked.

Vik groaned and his eyes turned to his instruments. One look sufficed to tell him. He turned back toward Rona, his eyes blazing anger. Had she been a man he might have booted her through the space locks.
"You're off your course," she jeered. "Something like a million miles. A day's travel, but with Venus moving ahead it will take you two days to catch her. Meanwhile the Imexi ship will have claimed Venus as a colony. You may beat our men to Mars, but Venus is the prize. Mars isn't likely to be inviting to colonists." She paused and smiled again. "Aren't you sorry you socked me in the jaw?"
"No!" shouted the spaceman. He swept the woman into his arms and carried her, kicking and screaming, to a room off his quarters. Unceremoniously he dropped her to the floor. A second later he had slammed the door and turned the key in the lock. "You'll stay there, Miss Olli, until I can turn you over to the governmental authorities on Earth!"

Vik strode back to the controls. He adjusted the apparatus to change the course. He had known of the Imexi flight to contest the North Kora claim to Venus. But Vik confidently had depended upon the superior speed of his craft to win the race.

IUE TO orbital motions of three planets, the Earth, Venus and Mars, the two ships had been required to take off at the same second on the first voyage beyond the orbit of the moon. The Earth and Venus would make their closest approach to one another at the critical hour of the flight. Then, a short time after arrival on Venus there would be another race to Mars to establish a claim on that planet, which would move into conjunction with Venus at the proper time for a second fuel saving flight. The entire round trip journey from Earth to Venus to Mars to Earth would require only $120,000,000$ miles of space flight. The maximum for such a trip might be more than $700,000,000$ miles, allowing for detours around the sun.

Now, Vik apparently had lost the race to Venus, thanks to a woman stowaway. He turned on more power. The response was silent, since the motors working in a vacuum could not be heard, but the dials above the controls told him that he had increased his speed.

He heard the woman pounding on the door behind him. Three hours had passed since her capture. She must be hungry again. With a shrug, Vik moved to the food locker and within a few minutes he had prepared some tea and biscuits which he carried to the woman in her prison. She took the food graciously, treating him once more to her warm, glowing smile.
"What will you do with me? Keep me here throughout the voyage?"
'Unless I forget myself and throw you overboard."
"Wouldn't you be lonesome without me?" Her eyes twinkled like the stars as she said that.
"I'd be a damn sight safer without you!" exploded Vik, slamming the door and striding back to his controls.

He set the robot and lapsed into a slumber. The motors pushed the craft onward. They were running at a dangerous speed, but Vik had to take risks. He was far behind in the race for the possession of a planet.

Morning came and he fed the woman again. This time he did not speak, in spite of her efforts to draw him into a conversation. Hours and days passed with sickening monotony as the bright planet ahead grew larger in size. The cloud draped sphere seemed to occupy the whole space ahead. Vik could spot black jutting peaks above the veil of clouds. At least there was land on Venus. Land for Koran colonization.

Even as Vik cut the motors and steadied the craft by the force nozzles which ringed the sides of the tube, he saw no sign of the rival ship. But the enemy probably had landed, claiming land by planting Imex seeds which would prove the claim to the international council.

THE SILENCE of space once more descended over the craft as Vik cut the roaring motors as his ship came gently down on a mud covered flat. There was wind, but no trees, not even a blade of grass. As far as Vik could see was barren soil without flora or fauna. Venus was a virgin planet, without signs of life.

From the locked door came Rona's voice. "Vik, do you see anything of the other ship?"

Anger surged through Vik Ansa's scale covered body. "I've other things to do, besides keeping track of your compatriot."
"Sorry!" came from Rona. "I only wondered if Vilmuj-the man that is flying the other ship-arrived safely."
"Your sweetheart?" asked Vik with a trace of anxiety in his voice.
"He means a lot to me!" said Rona warmly.

Vik left the room. He stepped into the space locks with a snort. Somehow, his mind would not concentrate on the task of testing the Venusian atmosphere.
"Huh!" growled the North Koran. "Take it easy, old boy! Anyone would think you were in love with her. Don't worry. She's not in love with you. She's waiting for a chance to stick a knife in your back so that you'll lose Mars as well as Venus. Humph! Maybe Mars is the best planet after all."

At length Vik finished his test. The gauges registered the proper oxygen content for Koran life and an absence of poisonous gases. Vik slowly opened the outer lock. He heard a noise behind him, but as he turned something came down on his head with a thump.

At first it was dark, then it grew lighter. He saw light coming through a porthole and he became aware that he was in a room on his own space ship. It was the same room in which he had locked Rona. His head ached and Vik groaned as he struggled to rise.
"I'm a fool!" he groaned. "I should have known she had keys to the craft or she couldn't have stowed away. She had them concealed in her clothing, waiting until I landed on Venus."

Weakly he managed to gain his feet. He tottered to the door. It was locked, as he expected. He beat against the panel, then listened. There was no reply. He tried the window, knowing that he could not break the metal glass capable of withstanding the impact of a small meteor. Escape was hopeless. Vik was alone and a prisoner without a friend in thirty-four million miles.

Hours passed and the Venusian day changed to night. Vik's voice had grown hoarse with shouting. Then he heard footsteps in the control room. A key slipped into the lock and the door swung open, re-
vealing Rona standing in the room beyond. Her hand grasped a neutron pistol.

She was dressed in a man's clothing, spattered with mud. Her hob-nail boots were torn by rocks. Her face was grimy and her hair was knotted and uncombed.
"I didn't take time to primp," she smiled. "We've got to get out of here, and I can't run this thing. Come on out, you. Set your course for Mars and take off. If you're going to win that race you'll have to get under way right now!"
"What about your compatriot, Vilmuj?" asked Vik sullenly. "Going to double-cross your sweetheart, or do you have another trick up your sleeve for me?"
"Never mind; get busy!" snapped the young woman.

VIK slowly moved to obey. In a few seconds he had the valves primed and the force nozzles in action. The craft slow. ly rose through the Venusian clouds.
"I should apologize for the bump on your head," said Rona as she seated herself in a chair behind Vik. "But after all, what else could I do? Surely you don't feel too ill -it was only a monkey wrench wrapped in a towel."
"Of course, if that was all-"
"What about that sock on the jaw you gave me?"

Vik shrugged. "Did you find your sweetie?" he asked, trying to change the subject.
"Yes, and he's laid claim to all the choice spots on the planet. That's why we're going to Mars. I daresay you can beat him."

Vik chanced a look over his shoulder at the woman. "Is this treason on your part, or a piece of an Imexi plan to get me out of the way?"
"It's neither. I want you to know that although I was born and raised on the Imexi peninsula, and while I'm a citizen of that South Koran state, I'm no spy. Right now I'm acting in your interest. See this?"

She held a small object aloft.
"That," went on the woman, "is the catalyst crystal from Vilmuj's space boat. It'll take him troo days to replace it. That should be plenty of time for you to outdistance him in the race to Mars."

With that she placed the gun on the table behind Vik. Then she turned her back to him and walked into the room where she had been held prisoner during the first part of the voyage. Vik did not try to follow
her, nor did he pick up the gun. He stood at the controls until the craft was once more in space, then he set the robot and retired to his own quarters, locking the door behind him.

But two people, alone in the cramped quarters of a rocket ship, find it impossible to avoid each other. Within two days hostilities ceased. Vik somehow felt assured that there would be no tampering with the controls now and that Rona was on his side. The reason was more than he could guess, but he trusted her. Nevertheless, he maintained a stubborn attitude toward accepting her as a trustworthy friend. He sulked like a spoiled child.
Then the craft entered that narrow fringe of the asteroid belt that dips inside the orbit of Mars. Vik stood by the controls, feeding the force shields and shifting the gravity center from time to time to avoid collisions with large meteors. Rona was with him, serving hot coffee and chattering to bolster his spirits. But Vik maintained his sulk.
"You're the limit!" she exclaimed in exasperation.
"I'm sorry, Rona. You are a good sport for an enemy alien!" conceded Vik. 'But I can't understand you."
"I've told you that now I'm on your side," she insisted. "If Vilmuj could get hold of me now, he'd probably give me worse than a sock on the jaw."
"I realize you're helping me. But why? Why the sabotage and treason?"
"This is my war," said Rona.

$\mathbf{A}^{T}$T LENGTH the danger was passed and Mars swam up to the space ship. The landing was quick and Vik and Rona stepped from the tuts into the twilight world of Mars. The sun twinkled dimly overhead, casting its lukewarm rays on the rolling Martiar. hills and leaving the valleys in deep shadow. The ground was carpeted with a heavy, moss-like vegetation. Here and there were scrub growths of what might have been mistaken for bushes. But they were only fibrous weeds.

The atmosphere was breathable, but thin, and the air was biting cold, close to zero Fahrenheit. Vik doubted ii the seeds he began planting in laying claim to the red planet would sprout. But he worked over the ground, which was the most habitable part of Mars, claiming the land in the name of North Kora, Earth.

Then on the fourth day after Vik's arrival, Vilmuj brought his Imexi craft to a roaring landing scarcely half a mile away.

Vik was alone, planting seeds. Rona was in the tube preparing a meal.

The Imexi ship had scarcely landed when its space locks flew open and a powerfully built South Koran emerged. The man came toward Vik with angry, striding steps. His face was grim and his hand grasped a neutron gun.

Over the thin Martian air came the voice in the Imexi dialect: "I'm going to kill you, creature of the north, for what you did to my craft on Venus!'

Vik's hand went to his hip. Subconsciously he brushed the vacant spot where his weapon should have been. But he had not carried the neutron pistol since his truce with Rona.
"I'm unarmed," said Vik.
Vilmuj paused. Then, with a disdainful gesture, he tossed his own weapon on the ground. "I'll do this job with my hands!" he roared.
"You should have kept the gun, Imexi. You'll need it!" smiled Vik as he advanced to meet his enemy.

A scream came from the locks of Vik's tube. Rona had seen and was rushing to stop the battle. But neither of the two strange Earthmen wanted to stop. They came closer and prepared to charge.

Then came unexpected interference. Around them the ground shook. Between them the soil rose into a bubble, like an inflated balloon. Something fibrous and hard encircled each of the two men.
"Stop fighting!" rumbled a voice. It was deep as thunder, like the rolling bass of a pipe organ. Vik and Vilmuj stopped their struggles. They hung helplessly in the grasp of the fibrous tentacles. Vik caught sight of Rona struggling, also in the grasp of the strange creature, behind him.
"You will not be harmed!" thundered the voice.
"Who-what are you?" blurted Vik.
"In four days of listening to your conversation and learning your language, I have wondered," came the reply. "But I suspect that I am your many times greatgrandfather."
"What is this-a joke!" panted Vilmuj.
The mound between the two Korans shook itself. A covering of moss slid away. The captives stared at a pulpy, pulsating organism.

THERE WAS an outer colorless layer surrounding the body. It resembled cytoplasm, toughened with fibers. Beneath this was a flowing inner substance filled with granular substances. There was a pulsating vacuole plainly visible and the prisoners could see dim outlines of an almost invisible nucleus.
The object was fully ten feet in diameter but it possessed marked characteristics of a one-celled animal.
"An amoeba!" exclaimed Rona.
"Ah! You recognize me from my relatives on the green planet? I thought as much. Yes, my children are there. I visited there nearly a billion years ago-'"
"A billion years ago?" Vik was incredulous.
"Yes. Let me collect my thoughts. I am all brain and sometimes it is hard to concentrate. I have divided uncountable times, but I'm still as much my own self as I ever was. You see there's no death save by accident in my race. When I grow old I simply divide and grow young again. I become my own child and my brother or sister. Then as I grow as my child, I divide again and become my own grandchild."
"Well, why don't you stick to your division and let me tear that North Koran apart!" shouted Vilmuj.
"Because death is a terrible thing when one lacks the power to become his own child and grandchild. Why should two similar animals, such as you try to kill each other, anyhow? It smacks of cannibalism, a thing I abhor. If you disagree, why don't you leave each other alone?"
"Because both of them want to claim Mars as a colony of their nation," explained Rona. "Back on Earth nations are always going to war. The Korans fight the Xubrans, the Xubrans fight the Imexi and all three fight each other. It means a lot of killing and a lot of glory when one nation wrests a few acres from another nation."
"If it's land you want, why don't you try Jupiter. Now there's a planet!' roared the amoeba.
"Jupiter is a little too fa» away and it hasn't a good climate," explained Rona. "The Korans, north or south, may try it some day, but interplanetary travel is new. Until this trip no one had gone beyond the moon. Then both North and South Kora decided to colonize Venus and Mars-"'
"Venus is quite sensible. But Mars? Why Mars? Mars is a dying world. Ve-
nus should be able to support life by this time, although when I did my space traveling it was nothing but a chunk of hot lava."
"But men can live on Mars. As long as it was near enough, both nations wanted it. The race for discovery began. I was opposed to it-"
"You?" Vilmuj seemed taken aback.
"I felt that if one nation got Mars, the other ought to be entitled to Venus, or vice versa. I argued that if the two colonizers confined their efforts to separate planets there would be no war between them."
"Splendid logic!" agreed the amoeba.
"So I flipped a coin. Imexi, or South Kora, got Venus. North Kora got Mars. To make things sure, I did a little sab-otage-"
"Tut! Tut!" rumbleci the amoeba. "Now that Miss Rona-I think that is what I have heard Vik call you-has explained the situation, let me tell you how we Martians solved a similar problem. Ours was not war, but overpopulation. We considered war as a means of controling population, but no one was interested. It's no fun fighting with yourself and among amoebae all of us are ourselves and each other. Finally our scientists developed a rocket ship that carried a number of me to Earth."

THE MARTIAN began untwining the processes that held the three Korans. Vilmuj and Vik, free at last, looked across the pulpy creature hesitatingly.
"You needn't try to start a fight again," warned the amoeba. "I'm watching. To continue, we decided to set up a colony on the Earth. We established a quite successful one and we've never been bothered with overpopulation since. The climate here grew too cold to stir us into frequent division and now all of me are lonesome." The amoeba ingested a tuft of moss and digested it thoughtfully.
"Why didn't the Martian amoebae overrun the Earth?" asked Rona.
"The Earth year is much shoiter than that of Mars. In order to do our quota of divisions each year we had to divide faster. Consequently we had not so much time to grow and the individuals became smaller. It was hard to check our shortening period of division and before we knew it, we were microscopic on Earth. Naturally, with such a small size, it became practically impossible to overpopulate the large Earth."
"Did you maintain communications long with the Earth?" asked Vik.
"Quite some time---until our supply of radium gave out and we had nothing to drive our rocket motors. The last of me to visit Earth was about one billion years ago. Even then there had been great changes in the Earth colony. Several individuals rebelled at their small size and tried various ways to grow larger. Finally some of me found that by dividing and not separating a larger individual could be created. The last experiments were quite weird, but it seemed likely that something worth while might be developed. Judging from you, they've failed miserably. I suppose you followed the trilobites?"
"Trilobites? Why they're so far back we've lost track. There haven't been trilobites on Earth since the Cambrian period, a billion years ago!"
"Tsch! Isn't that sad. It shows how I've lost track of things. But you are the latest development of the amoeba?"
"We claim to be," laughed Vik. "Of course, the Xubrans, with wings, claim higher physical advancement but it's the brains that count. I'm something of an atavism, since I have Twentieth Century blood in my veins. Like the South Korans, like Vilmuj and Rona, I'm less specialized but smarter."
"Well, my grandchildren several million times removed, don't you think you can stop this fighting among yourselves?"
Vik looked at Vilmuj. "I'm willing," said he. "But what of our governments? What of our patriotic duty?"
Vilmuj smiled back at Vik. "Our governments won't pay much attention to col-
onies on Venus and Mars," he said. "It's too expensive and the Xubrans will keep them busy on Earth. Besides, a successful colony always wants independence, while an unsuccessful one is a drain on the parent nation."

Vik stuck his hand toward Vilmuj over the amoeba's back. "After all, grandfather wants peace in the family," said Vik. "We won't even fight over the girl. If you have half an eye, yru'll see she prefers North Koran plus Twentieth Century!'
"Are you talking about sis?" asked Vilmuj. "You can have her!"
"Sis? She's your sister?" Vik whirled to look at Rona. Her face was flushed with anger.
"Vik Ansa, I've half a mind not to marry you! Prefer North Koran plus Twentieth Century, indeed!" She turned and ran toward the space ship.
"What of Mars?" asked Vilmuj. "Who gets it? North or South Kora?"
"Give it back to grandfather," shouted Vik darting after the girl.

The amoeba and Vilmuj watched them enter the ship. "They should go far on Venus," said the amoeba. "On Earth they started with an amoeba and developed the super-man. On Venus, they start with the super-man."
"How do you know they're going to Venus?" asked Vilmuj.
"I'm all brain," sighed the amoeba. "I sort of tucked the idea into their heads. Venus has been waiting .: long time for life to arrive."

The grandfather, many times removed, of man, ingested more moss.

## Two-Way Time

(Continued From Page 58)
Hastily I wrote, Not to be opened until 12:45 P. M., February 10, 1941,' and double underlined it.

I gave the script to Da Vinci and bade him farewell.

I was anxious to try the experiment on the Time Mactine. I requisitioned a robot, put it in the machine and told it to disconnect the inner shell.

Alyne came along to watch. We heard a wheezing roar when the pent up energy between the two shells was released. We peered inside to discever the inner shell had disappeared and the robot with it. But
something else had happened too.
Renaissance Milan had vanished from our sight.
"For better or worse," I whispered softly, "we have chosen the future."
"Why, Bill!" Alyne's eyes were starry.
"Oh!" I said surprisedly, "I didn't mean...."

Her lips set in a determined line, "You'd better.... Even if I had mad money I wouldn't know how to get home!"

There was only one thing to say when I took her in my arms. I guess it sounded pretty foolish:
"My littJe clinging vine!"

# FOUR STAR PLANET 

Feldman didn't mind paying through the nose for the rocketry expert's services-after all, a four star picture can't be made for nothing-but when the professor made a genuine interplanełary ship instead of a stage rocket-!!!

## by RICHARD WILSON

(Author of "Murder From Mars," "Transitory Island," etc.)<br>Illustration by Dave Kyle.

THE ASSOCIATE producer of Superior Pictures, Inc., looked at his boss incredulously.
"You're not going to make that turkey, are you, G. L.?" he asked. "Why, the plot's been kicking around the .quickies for years."

Gabriel Longstreet Feldman caressed the leather-covered script of Mars Calling with a pudgy hand.
"It's a good story, and a new theme. This guy goes to Mars, see-and the girl is a stowaway. When they get there they help the emperor fight off his enemies. They're colossal animals; we'll use the King Kong technique."
"It's kid stuff," protested Nat Spivak. "A fifteen episode serial that you could make in a month, maybe. But a feature picture, G. L., no."
"I think seventy-five thousand," said Feldman impassively. "We'll get Jorgens to direct. I wonder should we do it in Tech-nicolor-with Roy Mason to star?"
Spivak groaned.
When G. L. Feldman did things they were done in a big way. He spoke over the telephone for five minutes and the biggest names in Hollywood stood ready to give their all for Superior Pictures-and Superior Pictures' many-figured checks.

Alexander Jorgens, fresh from his triumph in Many a Slip, was chosen as director of Mars Calling. Roy Mason, once virile but still photogenic and a tried and true matinee idol, was to star. Opposite him Lee Franklin, imported from Broadway, where she had starred in a hit play.

To insure the technical end being all that a Feldman Production should be, G. L.
wired Hans Spael to grab a plane out of Philadelphia first thing and act as advisory director. That was where he made his first mistake. Not that the Herr Professor Spael, late of Berlin, didn't know his onions. He had been president of the Interstellar Society of that city before Germany cracked down on non-Aryans, laymen and scientists alike. He got out of the country barely in time to escape being thrust into a concentration camp and took up residence with relatives in the City of Brotherly Love. Here the American Interplanetary Society hunted him out and appointed him their secretary.

But Spael, as it turned out, was a mite overzealous. He dropped his roly-poly body into a chair, blinked at Feldman through thick spectacles, chatted with him for a minute or two, then trotted of to Superior's Special Effects department.

Provided with a pad of vouchers and a fountain pen, Spael went on a buying spree. A rocket ship they wanted, hein? Well, he would give them one. Orders went out to machine shops. Back came gleaming silver sheets, curved, ready for riveting. In the studio lab placed at his disposal Spael made other impressive-looking gadgets, checking from time to time wtih voluminous notes he had brought west from Philadelphia.

Hans Spael had been building miniature rocket ships since his days at Heidelberg and now that he had been given the chance he made the most of it.

So much so, in fact, that soon G. L. Feldman stormed into his little office with a sheaf of papers in his fist.
"What's this, professor?" he cried. "My

"Oh, look," said Bertha. "Monkeys!"

## $68 \star \star \star$ Future Combined With Science Fiction

God! When I hired you I expected you to spend a little money-but you don't have to run Superior Pictures into the ground!'

Hans Spael gave a Nordic shrug. "All I know, Mr. Feldman, is that you want a rocket ship. So-I give you one. Money? What is money? Come. I show you the ship."

The ship, lying almost finished on an outdoor set between a Texas saloon and a tropical jungle, looked realistic enough, but Feldman wasn't satisfied. He was, in fact, annoyed.
"Look, Prof," he said. "In the motion picture industry we don't need a whole space ship. I gave you the specifications. All we need is balf of it. How the hell are we going to set up the cameras for interior shots?"

Herr Professor Spael took a deep breath and launched into a strong argument, liberally interspersed with German invective. The gist of it was that he had been hired to do a certain job and that he was doing it to the best of his ability and that if Feldman didn't like it he'd take himself and his ability over to Magna-Stupendous Productions, where The Girl from Venus was being canned. Spael had learned a thing or two in his brief Hollywood sojourn.

Feldman sighed, bethought himselt of the thousands he had already sunk into Mars Calling and decided to let matters ride. After all, Hans Spael's name would look good in the screen credits-and the publicity department had already sent out releases with his name splattered all over them.

HANS SPAEL, in his scientific thoroughness, had taken so long to put what he called the touching finishes on his space ship that Director Jorgens had gone ahead, shooting around the take-off scenes.

They had just filmed the mob scene at the spaceport where Roy Mason, amid the plaudits of the multitude, waved tarewell to Earth and sealed himselt into the silver craft. The ship was larger ,han Feldman had thought necessary, since Spael was a stickler for accuracy. So there was enough room inside for a camera to shoot the fol-low-up scene where the hero discovered the female stowaway.

Mason and Lee Franklin were waiting for their cues. The cameraman adjusted his lens carefully as an electrician cursed softly, trying to maneuver his lights into positions where they wouldn't cast the shadows
of the mass of equipment Spael had had riveted immovably into place. Jorgens, in riding breeches, windbreaker and scart, sat in the canvas director's chair, eating peppermints. The script girl chewed on the end of her pencil. Spael stood by the thick round door of the ship, out of camera range. There was room for no one else.

Jorgens turned impatiently to the cameraman: "Ready, Burnett?"
"Ready."
"The light's okay, Harvey. Mason-take it from 'Virginia! What are you doing here?'"

The star nodded and cleared his throat.
"Roll 'em!"
The camera ground noiselessly. The movie folk, intent on their business, did not see Hans Spael ease the door shut. Those outside the ship assumed that the action was part of the script.

Then everything happened at once. There was a deafening roar and the floor jerked under their feet. Lee Franklin fell into Mason's arms; Mason sat down heavily. Jorgens and the script girl toppled over backwards in their chairs. The spotlight gave way and dropped on Burnett's head, knocking him unconscious. Harvey, the electrician, clung perilously to a support, his feet kicking wildly in the arr.

Jorgens rose to his feet, spitting peppermint. He ran up the tilted floor, now vibrating strangely. The heavy door retused to open.

He shouted above the din. "Where's that fool professor?"

Mason leaned Lee Franklin against one of the windowless steel walls.
"I don't know," he said. "Wait a min-ute-what's that?"

That was a ladder leading up to a circular hole in the ceiling. Jorgens scrambled up. His head disappeared trom view. He reappeared a moment later, his hand over his nose. Blood was trickling off his chin.

Lee pushed dark hair out of her eyes. "What happened?" she cried.
Jorgens sat down on the bottom rung of the ladder and dabbed at his nose with the end of his scarf.
"He kicked me," he said, looking dazed.
"What's going on up there?" asked Mason.
"He was jumping around pulling levers and talking German to himself. Then he saw me and let me have it." Jorgens felt his nose tenderly.

The script girl made her way to them up the tilted floor.
"Did you see anything else?"
"I saw clouds. It looked like the cabin of a transcontinental airliner."

The little electrician had revived Burnett. The two joined the group at foot of the ladder.
"What is this?" asked Burnett, shaking his blond head painfully. "A kidnap?"
"It looks that way," replied Lee. "I think we're in the hands of a madman."

Abruptly the floor became vertical and the six slid to the rear of the compartment amid the tangle of the camera and lighting equipment. Burnett extricated his big body from the mass of machinery and human beings.
"This has gone far enough," he said.
He made his way to the ladder, pulling himself along by a rail fastened to the steel wall. With a bit of maneuvering he navigated the now horizontal ladder and vanished from their sight.

Burnett hauled his body into the control room and lay there, panting, his feet propped against a stanchion, one hand grasping the top of the ladder. With his other hand he raked damp hair out of his eyes.

He saw Hans Spael, strapped in a pivot chair before a bank of instruments, his hands dancing nimbly over them. The man seemed absorbed in his work and glanced only occasionally through the great glass shield in front of him.

It was getting dark. Burnett craned his neck to look out a window that-normally -would have been above him. He saw gray masses of clouds; nothing more.
"Hey, you," called Burnett.
Spael frowned over his shoulder, then again gave his attention to the instrument panel.
"Stay right there," warned the German. "For your own safety I warn you."
"Don't worry," said the cameraman. He had found his body strangely heavy, its weight many times normal, since down and across had changed places. He added, almost conversationally: "What's it all about, prof? Gonna hold us for ransom?"
"Don't be childish. This is a scientific eggsperiment."
"Yeah. But we don't like being guinea pigs., Let us in on the secret, why don't you?"
"Yes," said Spael over his shoulder. "In
a moment. Soon Ewig-W eibliche will be able to fly herself. Then I will eggsplain everything."

Spael relaxed with a sigh, Hicked over a final lever and stood up easily. It took Burnett a minute to readjust his perspective. The German advisory director of Mars Calling stood upright without difficulty and polished his glasses. Burnett felt a trifle foolish lying on the floor. He got up.
"Spael's Gravity," said the professor patronizingly. "Now let us descend to talk with your friends."

THE group in the lower room was sitting uneasily on the floor, talking in hushed voices. Harvey was shaking his head over his kleig lights and coiling wire gloomily. Mason and Lee Franklin were engaged in a subdued argument. The script girl was wiping the last of the blood from Jorgens' upper lip. All looked up as Spael and Burnett clumped down the metal ladder.

The director jumped forward.
"All right, Spael. We've had enough of this. Take us back to Hollywood."
"Yeah," said Harvey. "I got a date tonight."
"I'm afraid it will be impossible," soothed Spael. "We are thousands of miles from Earth at this moment."

Lee, for some reason, looked a tritle amused. Not so Mason, who seemed not only annoyed but a bit scared. He spoke as if Spael were a maniac.
"Look here, Spael," he said. "You can't do this sort of thing. Just because we're making Mars Calling you have no right to pop off and take us there against our will.",

Burnett laughed an interruption. "Aren't you being a little silly, Mason? Suppose we listen to the professor for a while. We might learn something."

Spael spoke to them quietly but forcefully. Gradually any doubts they might have had about his sanity were dispelled. He was a man possessed of a burning ideal, but his mind was clear and lucid. For many years he had been working on the th ory of transspatial travel. He had made calculations and models almost without number, corresponded with other men similarly convinced throughout the world, exchanging information, plans and theories.

He knew he was right and only awaited an opportunity to make his dreams an actuality. Superior Pictures had done that, providing not only the opportunity but quite
a bit of the cash. Spael's cronies chipped in liberally when they got wind of his slightly unethical but highly scientific scheme.
"And so, with the safety of six innocent people far from your mind," sneered Mason, in no way mollified, "you put your daft plan into action. Mars, indeed!"

Spael smiled indulgently.
"But we don't go to Mars, Mr. Mason," he said. "At the moment Venus is much nearer. And also warmer. So we go there. Does this, make you happier?"
Mason scowled and turned away.
Spael added a word of triendly advice. "I shouldn't do anything like-violence, or sabotage. Remember only I can get you back to your homes."

The Ewig-Weibliche, or The Eternal Feminine, as Spael called the space ship, after Goethe, was a not too roomy craft, but there was room for all to bed down comfortably with a little left over to provide occasional necessary privacy.
Shortly afterward Spael took Burnett into his confidence by teaching him some of the fundamentals of navigation. The two spent many hours closeted together in the control room.
Don Harvey and Bertha Buchanan, the pert blonde script girl, were to be discovered in odd corners practically anytime exchang. ing reminiscences and getting along nicely, thank you.

Alexander Jorgens divided his time into three parts: a) writing a play, b) playing solitaire, and cheating, and c) sleeping. He was also raising a beard, for years a secret ambition.

Roy Mason went around hating people. He also hated the phonograph Hans Spael had brought along.

It seemed that among the things Spael picked up in America was a taste for Boogie Woogie. He had made a collection of about two dozen piano recordings which he, Stan and Lee would sometimes play for hours at a time, sitting entranced as the eight-to-the-bar rhythm tinkled and pounded.
Thus, aboard the Ewig-Weibliche, the weeks passed in montonous harmony.

I
URING one of the arbitrary divisions of time they called days aboard The Eternal Feminine, Hans Spael called Stan Burnett into the control room and pointed
out a hazy, ill-defined mass of white far ahead of them.
"Venus," he said succinctly. "In two days we'll reach it."

Stan reassembled his camera near a porthole and shot a few hundred feet of the uninspiring but historical view.

Spael busied himself checking over crates full of mysterious apparatus in a tiny compartment and peering through a built-in telescope in the nose of the ship.

Venus grew larger, seemingly less substantial, as they approached it. Soon vagrant wisps of white mists tore past the windows.

Spael gave a "hang on" warning and set the ship on its tail. The gravity of the second planet gripped them. There was a shudder as the rockets began their tympanic throb.

Stan and Lee watched as Spael, strapped in the control chair, bent the ship to his will, sighting below through a periscopic arrangement of mirrors, adjusting the blasts from the rear and side jets, keeping its bow pointed upward as it settled to the surface of Venus through the dense, almost impenetrable atmosphere.

They had come to admire the skill and courage of this little, rotund German refugee, whose previous experience in the freld of rocketry had been limited to experiments with relatively tiny, almost toy-like models.

Lee sighted green vegetation-covered water below, stretching in all directions as far as the mists permitted her to see. She nudged Stan, who called to Spael.
"Ja wohl," the pilot replied. "I see it."
There was a shock as the tail of the craft hit the water. The ship sank almost to its nose, then bobbed to the surface, where it floated half-submerged on its side. A slimy, green growth streaked the observation window.

Spael shut off the rockets. He stretched luxuriously.
"We have accomplished what is most difficult. Now we will make tests of the atmosphere."

Back in Hollywood, Earth, the newspapers finally realized that the disappearance of Roy Mason, Lee Franklin and Alexander Jorgens was no publicity stunt on the part of Superior Pictures and splashed the story over their front pages, surmounted by screaming black headlines.

Gabriel Longstreet Feldman lost no time in cashing in on the free advertising. Soon
thousands of theaters throughout the nation were showing the startlingly incomplete Mars Calling to capacity houses.

Outside of a slight pang of sympathy that no one really noticed, G. L.'s only apprehension was that the rocket ship might be found in the Nevada desert, or washed up on the Pacific shore before the movie had lived out its highly profitable life-span. Like all showmen, Feldman was deathly afraid of the cry, "Fraud!"

IANS SPAEL drew the little box back through the double airlock. The unofficial crew waited impatiently as he checked over his figures. Finally he looked up with an excusable smile of self satisfaction.
"Air breathable, although heavily saturated with moisture. Temperature $93^{\circ}$ Fahrenheit. We can start eggsploring as soon as we find land."
"If we find land," muttered Mason surlily.
"We'll find it," said Stan. "This is no wild goose chase. But how do we get to it, professor?"
"We turn Ewig-Weibliche into a water launch. The rocket jets will serve as propellors."
Spael hurried back to his control chair. Since chance alone would determine in which direction land lay nearest, he merely started the blast motor, letting the ship nose straight ahead through the water. It was necessary to make frequent stops to clear away the slimy plant life from the bow observation window, where it was tossed by the waves slapping against the speeding craft.
Occasionally, off to one side, a weird giant sea-beast would leap from the water, to shake its pallid body in the diffused sunlight before sinking back beneath the surface.

Hours later they came upon land. For as far as they could see there towered giant trees, which grew to the water's edge. Hanging from the trees were vines and creepers in profusion. Bushes and ragged grass fought their way between the towering trunks. The landscape presented a seemingly intraversable barrier to any overland journey.

Spael was forced to drive the ship many miles along the shore before he found a spot that would give a landing party a foothold. It was a miniature harbor with a
narrow neck. Rocky land sloped to meet the water.

Spael jockeyed the ship to shore and threw open the circular port. A wave ot hot, humid air rushed in on them. The first thing they heard was a deep, penetrating buzzing of insects in the jungle. A threnody of sound that rose and fell, everpresent.

Stan Burnett and Don Harvey leapt ashore and made the ship fast by passing ropes around a thick-trunked tree on the slope.

It was with an intangible teeling of awe that the party of seven stood on the solid land of Venus, looking about them. The soggy, verdant barrier before them, the green-covered sea stretching endlessly to the near horizon and above the bright, cloudwhite sky that seemed to press down on them.
"Well," said Lee, breaking a long silence, "now what?"
"Now," said Stan, "you wish that the first words spoken on Venus had been something a bit more dramatic. But to answer your question, suppose we ask them," and he nodded to one side.

Silently, unobserved, two strange little creatures had crept through the bushes atop the slope and stood regarding them with interest. They were small-four-feet-five, Stan thought-covered with brown hair, standing on two bent, stubby legs, with arms that dangled below their knees.
"Oh look," said Bertha. "Monkeys!"
Hans Spael raised his hand in a gesture of friendship. Then he made come-on-over motions. The little brown men seemed to confer, but made no move to flee or come closer.

Spael and Stan climbed the rocky slope toward them.

THEY STOPPED six feet away. The Venerians made no move, but stood still, looking at the Earthmen under their hairy brows. They looked intelligent, more manlike than simian. They wore no clothing, but were amply provided with fur.

On impulse Stan reached into the pockel of his once-white slacks, produced a shiny quarter and offered it to them. The nearer creature accepted it gravely, examined it carefully, turning it over and over in a pink hand, then handed it to his companion. He picked a pebble from the ground and handed it to Stan.

Stan bowed, then broke into a smile. The

## $72 \star \star \star$ Future Combined With Science Fiction

Venerians smiled back, disclosing large, white teeth.

There was silence, broken only by the drone of the insects that flew around them, and the lapping of the waves on the rocky shore.

Suddenly one of the little men broke into a quick, barking speech and pointed into the jungle. He moved oft a tew feet with his companion, and beckoned.

Spael and Stan exchanged glances. Spael nodded. Stan yelled "Come on!" to the rest of the party, who stood watching them. They came.

The natives were evidently leading them to their home. At first they had swung through the trees with a swiftness and agility that soon left the Earth people tar behind, floundering in the weed-choked jungle.

On seeing their difficulty, however, they turned back and led the way along a trail that wound among the trunks of giant trees. At times they were forced to stoop under low-hanging branches, or skirt water-filled holes in the path, but for the most part they encountered no trouble.

Stan Burnett and Hans Spael went first, after their guides, then Lee, Harvey and Bertha, followed by Jorgens and Mason. Roy Mason was doing a good deal of cursing and ineffective swatting at the horde of insects that droned about them. Harvey had brought a portable camera along and was busily shooting everything in sight.

At length they came to a point in the trail where it breasted a hill. From the peak they could see a walled village nestling in the valley beneath. Their Venerian leaders chattered excitedly. It appeared to be their home.

Halfway down the hill there was a cry from Lee. Stan spun around.

Behind them, on the trail, four great green-skinned things were making oft with Jorgens and Mason. Stan caught only a glimpse of them. Spael pulled out a gun and fired-futilely. The abductors had vanished.

Stan and Harvey were all for going after them, but Spael pointed out the utter hopelessness of it in this totally untamiliar jungle, suggesting that they go on to the village first. Reluctantly they agreed with him.

As they approached the village across a cultivated plain, the log gates swung open. The people from Earth were met by a
crowd of chattering brothers and sisters of their guides and ushered inside.

The little village proved a surprise. They were amazed to find evidence of a tairly high order of civilization here. Well built wooden houses, rudimentary streets, markets, a general air of friendship-and, what surpristd them most: clcanliness.

The houses were all one storied, built of crudely cut timber, with open-shuttered windows. With one exception. In the center of the town was a house of untinished wood that rose proudly above its neighbors. A plaque over the door in a kind of script seemed to proclaim that here lived the chiet of these little people.

Their two guides ushered them up a short flight of steps and inside. When their eyes became accustomed to the light they made out a throne-like chair at one end of the room, on a little dais. On it sat a figure that seemed, at first glance, little different from the others. He was clothed in brown fur, but his hair and beard were white.

```
It was a human being!
```

IT WOULD be difficult to say which was more astonished-the group from The Eternal Feminine or the man on the rude throne.

The man stood up when he saw his visitors. He hobbled forward, his hand outstretched, his old eyes shining, a smile of joy on his lined face.

Spael grasped his hand and shook it heartily, a stunned look on his face. No one spoke for some moments. Then questions poured out in a torrent of words.

The old man held up a hand. "Just a moment, my friends," he said slowly, as if it were only with an effort that he was again able to speak a terrestrial language. "Please sit down; then I'll tell you my story. Oh, it is so good to see you!
"My name is James Block. I am an American. Many years ago-in 1926.... how long has it been?"
"Fifteen years," supplied Stan Burnett.
"In 1926 I was a millionaire, retired from business, without a family, bored. With too much money for any one man to have. I decided to spend it in the most useful way possible. I was then sixty. I gathered about me scientific men from throughout the world. Together, for two years, we worked secretly on my estate in Sullivan County, New York.
"Often I had read that travel between the planets was possible-if only enough money could be raised. I had the money, but not the brains. So I hired them. For two years we worked ceaselessly, experimenting, testing, discarding. Finally, in May, 1927, we were ready to embark. Only four of us could go. There was room for no more. The others were sworn to secrecy. I made them promise to say nothing until we returned."
The old man ran a bony hand through his hair.
"Our trip was a partial success," he went on. "We reached Venus sately. That is, we got into the gravitational pull of the planet without difficulty. It was when we tried to land that disaster overtook us. The ship crashed. My companions were killed. Only I remained alive, although I was severely injured.
"I was found by these friendly brown people, who set my broken bones and nursed me back to health. Then, in gratitude for the little things I was able to teach them, they made me their chief. I have been here since."
There was silence when James Block finished his story.
"Your secret was well kept," said Hans Spael after a time.

James Block smiled. "And now tell me how you came to make your journey."

Spael glanced at the others, who looked back at him significantly. He smiled and told his story quickly, leaving out nothing. Finally, telling his tale chronologically, he mentioned the half-seen green beings that had made off with Mason and lorgens.

Block leaned forward. "Green, you say? And they captured two of your friends? Why didn't you speak of them before?"'

Spael shrugged. "To tell the truth, I had forgotten.'
"Come with me," said James Block, taking down a cane from the wall and hobbling stiffly through the door. "Those green devils, eh? I'll fix 'em!'

THEY followed the mumbling old man down the native street. A chattering crowd of little Venerians ran after them till they felt like part of a procession. Their host stopped under an immense tree-one that towered high above any of its neigh-bors-whose thick branches were thrust out in all directions. Steps were cut into the
living side of the tree, extending upward as far as they could see.
"This is our jungle transportation company. Lines from the Grandtather Tree, as it is called, stretch in every direction to connect it with other villages and food supply stations. The longest line is a trifle under two miles. That's the one you're going to take."
"Not me," said Bertha, looking up dizzily.
James Block laughed. "No, not you. I suggest Mr. Burnett and Mr. Harvey. Four of my people will accompany you." He gave them a few brief instructions about the line-cars, adding orders to the little brown folk in their own language. Spael shoved his automatic into Stan's hand.
"He'll fix 'em, eh? So we're elected," muttered Harvey bitterly, looking over his shoulder at the dots that were their friends far below. "The old goat. Those green things can tear Mason and Jorgens to little pieces for all I care."
"A very uncharitable outlook. When all the human beings on this planet can be counted on the toes of two feet it pays to keep track of 'em," said Stan. "Damn'these gnats."

They had reached a long wooden platform built firmly into the tree.
"Little white scallions!" murmured Harvey. "An El station!"

It was, literally, an elevated terminal. A wooden car, seating six, was waiting for them. It was attached to a wooden rail above by three large wooden wheels. There was no support below. The rail, which seemed to be made of a single plank of wood-probably from.such a tall tree as they were now in-stretched in a long arc to the next tree, and so on.

With a wave of his hand Stan signalled that they were ready. The car sped out of its terminus and down the incline, a rope attached snaking along behind, by which means the car could be hauled back.
"Woo!" cried Don Harvey, pulling his head back over the side. "Don't look down. It gives Hlip-flops."

The ride was a nightmare. The car swayed from side to side and bored its way through high curtains of green with dizzying speed. The wooden wheels that held it to the rail clacked away in a ghoulish chuckle. The four brown men seemed to be enjoying themselves hugely, which only increased the Earthmen's discomfort.

Finally their speed slackened as the car

## $74 \star \star \star$ Future Combined With Science Fiction

went up an incline. The Venerians grabbed ropes hanging from the tree that marked the end of the line, made the car fast. They clambered out. Harvey and Stan followed them down another flight of hewed steps that wound around the trunk of the tree.

There was a trail at its base. They followed it, slapping at a thousand undernourished bugs. At length their native guides went more cautiously, with a good deal of subdued chattering among themselves. Soon they motioned the Earthmen to silence and squatted down behind some bushes at the edge of a clearing.

Stan and Harvey pushed aside a branch and peered out.

In the center of the clearing was a large flat building of gray steel, built half underground. It was windowless, but a door faced them. Next to it, as if on guard, they could make out a tall green frgure.
Stan fished in his pocket, got out a telescopic lens camera-attachment and looked through.
"What's so funny?" asked Harvey, as the other doubled up with laughter.
Stan passed him the glass. "Look for yourself."
What Don Harvey saw was a green, semihuman figure, like the ones that had carried off Jorgens and Mason, leaning nonchalantly against the steel wall, a tall weapon by its side. It seemed to be reading a bookthrough a pair of strictly tellurian spectacles set incongruously on what appeared to be its nose.

66 HAT is it?" asked Don.
"Looks like something out of Alice in Wonderland," said Stan. Suddenly he noticed that they were alone. Their brown guards had vanished. Almost immediately he saw the reason.

He poked Don in the ribs.
Standing in the trail were three big brothers to the monstrosity they'd been spying on. Seven feet tall, green, covered with scales, they looked like men in alligator costumes-but without tails. They walked on their hind feet. Their eyesockets, set deep in their great heads, seemed vacant. In their forepaws, or hands, they carried ugly longnosed weapons, unfamiliar, but nonetheless deadly looking.

The Earthmen got up slowly. The green beasts motioned them toward the building. They walked to it without a word. The
guard they had been observing made some sort of salute as they approached, and threw open the steel door. Stan caught a glimpse of the book it had been studying. It was The How of Writing Plays. It and the glasses had belonged to Alexander Jorgens. They walked down a short flight of stairs.

The room was large; filled with meaning. less though evidently highly scientific apparatus. Another monster entered from a door at the far end. He was identical with their captors.

Stan Burnett and Don Harvey had been in the movie game a good many years and it took a lot to amaze them. But this latest development in their life had them completely floored.

The green being signalled and their captors vanished the way they had come, taking their weapons with them. The one that remained was unarmed.

HE WAS gesturing to them with a horny finger. They approached. He bade them look into a bowl of what seemed to be mercury. The bowl was set into a metal base from which wires coiled, trailing to a humming black-and-silver machine behind it.

Harvey and Stan looked at each other, wondering, then bent over the bowl. A sworl of color gave way to a series of images that swiftly succeeded each other on the surface. No....not on the surface. They were deep, three dimensional. And they were infinitely more real than any motion pictures could have been.

Stan realized that this bowl condensed the thoughts of the green one, transmuting them into images. Or, perhaps, the image existed only in the mind of the sender and the receivers-the bowl acting merely as a focal point.

So absolute was the illusion, however, that the two men seemed to sink bencath the surface of a heaving, green sea. Down, down....Through immense sea-gates they went, into a city, subaquatic, sprawling, crowded with people. But still not people. They were gray in color, raguely manlike bipeds, with tiny heads and glowing eyes....

There was a confused sensation as of time passing swiftly. They saw a new activity among the people. An undersea craft was being built. Upon its completion it was launched and sent out with its crew through
the sea-gates-across the ocean-to land. A look into the ship's interior showed the gray people getting into heavy suits of green armor to protect them not only from the powerful rays of the sun, but from insect bites as well.

An experimental laboratory was set up on shore. Specimens of plant, insect and animal life were examined, dissected, analyzed. Among the animals was a race of brown, shaggy people who offered great resistance to their capture.

In the bowl Stan and Don saw their own space ship plummet into view from the cloud layet of Venus....the trip across the plant-covered sea....the trek inland to the village....the abduction of Jorgens and Mason.

STAN looked up. He could see now that the green of the Venerian who stood before him was an artifcial skin. By looking deep into the eye-sockets he could see shining intelligent eyes.

He looked back into the bowl. It was blank, until their-host?-again looked into it. Another scene was there. He saw Jorgens and Mason, unharmed, sitting on steel benches in a small room, looking dejectedly at the floor. A green-armored man was standing guard near the door, looking at them with interest.

They saw answers to their questions in the bowl before they were aware that the thoughts had left their minds. In picturewords they learned that this strange race from the sea-bottoms of Venus was not warlike, save in self-defense, and had no interest in the brown men other than a purely scientific one. To be sure, one or two had been slaughtered, even as Earth scientists dissected animals for experimental purposes. The sea-folk, recognizing the visitors to their planet as belonging to an obviously higher type of civilization, in. tended them no harm. On the contrary, they offered to collaborate in research-to probe the mysteries of this upperworld that they had discovered almost simultaneously.

Again the scene changed. They saw the trail leading to the village. From out of the trees dropped the four little men that had acted as guides to Stan and Don. They raced through the gates and into the chief's house. Soon Hans Spael, James Block, Lee and Bertha ran out. Stan saw anxiety written on their faces. Spael seemed to be
arguing with the others. He ran to the Grandfather Tree and began to climb up.

The bowl again became a whorl of color. Stan and Don looked at their host.
"Collaboration?" said Stan. "Sure!" He looked at Don, who nodded. He extended his hand. The green one, understanding, took it. Then he turned and motioned them to follow him.

Mason and Jorgens looked up as they entered the room.
"Did they get you, too?" Mason asked gloomily.
"What do you mean-get us?" asked Don. "We're not prisoners."
"Certainly not," said Stan. "Didn't they let you peer into the little crystal ball?"
"I'm afraid we were uncooperative cap. tives," said Jorgens. "We fought and kicked."
"Well, these people are all right," said Don. "We found that out."
"We'll explain later," interrupted Stan. "As I see it, we have a job to do. We have to head off Spael before he does anything foolish. That right?"

He turned instinctively to the Venerian who had "talked" to them through the color-bowl. He nodded his great head. Stan looked surprised.
"Can you understand me?" he asked.
The Venerian rumbled out a short, hissing answer.

Stan shook his head. "Sorry," he said. "The shoe's on the other foot there. But listen. That fellow, Spael, who's on his way, is more your type of man. He'll understand a lot of stuff that probably went over my head. Suppose I go out and keep him from stepping into something up to his neck. Okay?"

The Venerian acquiesced.
Stan Burnett and Don Harvey met Hans Spael as he arrived, puffing, at the clearing. His little brown companions remained behind in the jungle, afraid to venture farther.
"Take it easy, professor," said Stan. "Everything's fine-nobody's hurt. Come in; we've got a surprise for you."

Spael's curiosity was aroused by the sight of the gray steel building. He followed them without a word. He was rather taken aback when the green Venerian extended his horny hand in a gesture of friendship instead of hitting him with it. Spael shook it eagerly and the two went over to the bowl.

## $76 \star \star \star$ Future Combined With Science Fiction

"This is where we came in," said Don. "What say we go outside for a smoke and try to get some of the woozies out of our brains?"
"As I see it," said Stan, inhaling deeply on his cigaret and tossing the match to the damp grass, "this race has a greater intelligence than we have. While not exactly fattering, it's pretty amazing. Take Oswald there."

He waved a thumb at the guard at the door, who had stopped perusing Jorgens' play-writing handbook and was peering nearsightedly through Jorgens' glasses at the smoke issuing from the men's nostrils.
"He probably understands everything we're saying." Stan turned to him. "Do you make anything of that book you're reading?"

The Venerian nodded his head in vociferous assent and hissed a reply.
"May I see your gun?" asked Don; futilely, he thought.

The green one handed it over eagerly, evidently positive that Don meant him no harm. The men examined the weapon with interest. There was a long barrel, fine wood stock, but no breech and no trigger. He handed it back to the Venerian, puzzled.

The other took it back. He propped it on the ground with the barrel pointing harmlessly toward the sky and stood off from it six feet or so. Then, concentrating on it with an intensity that lasted less than two seconds, the gun went off. There was a burst of soundless flame.
"I'll be damned," said Stan softly. "A thought-gun!"

Hans Spael came through the doorway, holding a one-sided conversation with his green-clad host. Mason and Jorgens also appeared, looking somewhat dazed.
"We should return to James Block now," said Spael, squinting at the darkening sky. "We'll be back tomorrow."
"Takes it in his stride, doesn't he?" said Don. "As if this sort of thing happened every day."

They collected the little brown tolk at the edge of the clearing and waved good bye to the green one in his doorway.

THE DAYS passed swiftly after that. Spael was to be found at the undersea people's laboratory almost continually during the daylight hours. It took a lot of persuading to get James Block to pay a visit to what he had come to consider his
sworn enemies, but the scientific mind that had been slumbering for theen gears finally made him as enthusiastic a visitor to the gray steel house in the clearing as was Spael. When the brown tolk learned that no further harm would befall them from their planetmen, they too swarmed over, making gentle nuisances of themselves.

At Stan's insistence, Spael reluctantly took time off from his collaboration with the Venerians to give him further instruction in piloting the Ewig. Weibliche. Lee Franklin, who seemed only recently to have discovered sterling hidden qualities in the tall blond cameraman, tagged along, taking it all in. Jorgens went on writing his play, seemingly content with life on Venus now that he'd got his glasses and book back. Roy Mason got more and more irritable, the more so when the cigaret supply ran out. Don and Bertha took no note of the passage of time and wandered blissfully around the jungle trails together.

One day Mason strode angrily up to Spael.
"When are we going to get out of this place?" he cried. "It may be all right for you people, but I'm a man of imagination and I want to get back to civilization-"

Lee snickered.
Hans Spael took a deep breath. He had been fearing this moment.
"I suppose it is only fair," he said. "I have been so concerned with my work that I have given no thought to the feelings of others. However, I have been instructing Mr. Burnett in space navigation, and now he is as proficient as I am. Which," he laughed, "is not dificult to believe."
"I'd kinda like to get back, too, come to think of it," said Don dreamily. "Back to cities and farms and people. ...autos.... churches...." He looked at Bertha, who blushed.
"Do you mean you're going to stay here?" Lee asked Spael.
"Yes. There is much to interest me here. I have much work to do yet. And Mr. Block must not be left alone."
"I thought he would come back with us, said Jorgens. "I should imagine he'd jump at the chance."
"On the contrary," smiled Spael. "He has become so used to the place that it would hurt him to leave it. Thirteen years is a long time. And he is an old man....
(Continued On Page 85)


## GALACTIC GEAR

Mr. Sylvester Peeke was a methodical but henpecked man. This is the story of the gift from space that threw his ancient car-and his life-into a new, high gear. Illustration by Conanight.

"FILL 'er up," said Mr. Sylvester Peeke to the grimy station attendant who was climbing out of the grease pit. He spoke in the quavering voice of the timid man. "Probably a henpecko," mused the mechanic, who prided himself as a reader of character. "Sorry, Sir, but I can only let you have five gallons as you're not one of my regular customers. Defense, you know."

Adjusting the glasses on his long, lean nose, Mr. Peeke produced a card reading: COMMERCIAL.
"Oh-that's different," and holding the nozzle of the gas hose into the tank of the old two-door coach, he watched his customer wipe, with meticulous care, the smudges from his rimless spectacles.
"-And, say-? Would you take a look at that gear rod of mine?" Peeke asked, readjusting the glasses to his

## An Off-Trail Story by CHESTER B. CONANT

nose. "It's got a crack in it near the base. How long do you think it will last?"
"I'll put some tape around it, that should hold," said the greasy man. "How far you going?"
"I hope to get to Pinetop Junction by tonight. You wouldn't have an old gear shaft on hand, would you?" he asked hopefully.
"Naw." The mechanic applied the tape to the injured shaft. "But this'll hold it all right. You've only got 92 miles to go."

Mr. Peeke drew a green bill from a rather large wallet and handed it to the man. While he waited for his change he went around to the back of the car to see that the tank cap was securely fastened.
"Here y'are. That's two, three, four-five dollars. Thank you. Take it easy in those mountains," he cautioned. It was quite an unnecessary counsel for Mr. Peeke was by habit one of the most cautious of men. His life on the conveyor belts of many industries had conditioned him well. Too often he had seen the mutilated hands of less cautious workers.

He rolled smoothly along the asphalt at a steady 45 . As he watched the road unroll before him he lit a cigar. Replacing the electric lighter in its notch in the dashboard he leaned back with a sigh of contentment. It was pleasant to roll along quietly, alone. Still a few hundred miles from home, he could sit back and enjoy it.

SOME eighty miles ahead a floridfaced policeman was upbraiding an out-of-town motorist who had stopped three inches past the white line of a crosswalk at a red signal.
"Greer's at it again," said a local pedestrian to his companion.
"That loud mouth of his is going
to get him into trouble one of these days. That's his third argument in the last half hour."
"All right, on your way," the cop was growling in an over-officious tone, "and watch your step the next time you come through here." The unfortunate driver nodded his head, anxious to be off. The fat arm of the law waved him on. It was the policeman's last argument.

In a small town nestling on the bank of a lazy river the village goon was annoying two pretty girls with the putrid carcass of a long-defunct woodrat. He was a husky imbecile and scarce were the heroes who would tangle with him. He guffawed idiotically at his joke, feeling certain of a long mean life. But he didn't know. . . .

Alda Peeke placed the dirty dishes left after her bridge party, in the sink beside the morning's breakfast crockery. She went into the bathroom and contemplated the mirror's reflection of her painted, pudgy face, trying to see some youth in it. Taking some tissues she began to remove the thick make-up, wondering how soon her husband would return.

On receiving news of his rich uncle's illness she had insisted that her husband visit the old man. There were only two other living relatives and she hoped to have her husband share in the will. With five or ten thousand dollars she would soon show that rich Mrs. Willit a thing or two. After a week of incessant nagging Mr. Peeke had surrendered.

Clad in a shabby housecoat, Alda lay back on the bed, greedily contemplating a life of lazy luxury. Water dripped from a faulty spigot in the sink into a cup, precariously perched on top of the pile of dirty
dishes. Beneath the sink a fat roach began his long journey upward.

Her husband seemed to be taking his own good time in getting home, she mused. He should have arrived days ago. She frowned at the thought, and made a mental reservation to 'fix' him when he did arrive. The character-reading garageman hadn't been far from wrong. Mr. Peeke was indeed henpecked. Alda, garrulous and domineering, had made his life a miserable monotony of endless squabbles.

ABOUT twelve o'clock that evening Mr. Peeke reached the mountains. He had a delightful meal in a quiet roadside inn and, having lit a fresh cigar, was soon on his way. The old car labored up the steep grades loudly protesting the strain on its metal heart.
Cautiously he swung around a hairpin curve to a downgrade between the silent pines guarding the road. Their pungent perfume was invigorating and Mr. Peeke breathed deeply. A jack-rabbit springing suddenly across his path almost made him swerve into their brooding depths. The going was smooth then until he reached another steep upgrade ending in a sharp curve at the summit.
"Slow—Sharp Curve Ahead!" warned the reflected letters of a sign on the side road. Mr. Peeke slowed down for the hill and began to shift back to second. The gears complained noisily at his touch and refused to budge. He pressed the clutch down to the floorboards and tried again. With a quick snap the gear shaft broke off in his hand. He gave the wheel a swift turn and came to rest at the side of the road, a few feet from the reflector sign.

For about ten minutes he fumbled
with the gear rod with no success. He removed the tape and flung it into the woods with a petulant moan. Stranded on a deserted mountain road in the early morning, he was at a loss as to what to do next.

He had been chewing viciously on the stump of his cigar. Now he lit it nervously and stepped out into the road. Not a car in sight. The night was cool and quiet around him. Looking through the pines across the road the moon was a yellow ghost-face. By its pale light he searched for something to replace the ruined shift rod. In his frantic fumbling he had twisted it into a snakelike mess beyond salvaging.
A jack handle might do the trick, he thought. Rummaging among the tools under the seat in the dark, it took him five minutes to find it. Mumbling a quick prayer, he tried to fit it with no luck. The jack handle went back to its dusty home with a crash magnified by the surrounding silence.

Mr. Peeke spat out the soggy remnants of his cigar and sat down on the edge of the runningboard, ready to weep with despair. The phantom moon rose higher and grinned down at him spitefully. Something stirred the dry underbrush somewhere in the woods near him and hopped out into the road. Those jackrabbits! He threw a rock at it with a violence that strained his arm. Rubbing the abused member he paced up and down beside the car. It was growing cooler now. He shivered and buttoned his jacket.
With some feeble idea of cutting a branch for use as a rod, Mr. Peeke took out his penknife. He stepped off the road into the ditch and slipped on some loose stones, dropping the penknife. Another such mishap would surely make him utter a vile
oath. He got down on his knees and felt along the bottom of the ditch toward where he thought it must have fallen.

Near the warning sign his hands came in contact with something hard and rough. It was a spongy mass of iron embedded in the dried mud of the ditch. On closer examination he recognized it as a small meteorite such as he had seen once scattered about on a stretch of wasteland in Pennsylvania. He tugged at it and it came forth to reveal a slender rod of some three yards in length.

THE meteorite seemed to have melted around one end of the rod. At its other end the long, narrow rod, which was about an inch and a half in diameter, came to two rounded prongs. If only it would work! Mr. Peeke's hands trembled so that he dropped the rod back into the ditch. Forgetting his vow of a moment ago he bent to retrieve it and was impressed by its unnatural weight. Its lightness was hardly in keeping with its dimensions. Beneath its coating of caked mud it shone with a peculiar brilliance much like highly-polished chromium. Yet it was not chromium, nor was it plated. From his factory experience Mr. Peeke knew that it was a solid metal.

He went to work with a rag which had been a pair of vividly-dyed undershorts in its earlier form; a birthday present from his extremist spouse. The dry mud fell off quickly before the cloth and some oily waste served to polish the remaining dust from the shaft. Smoothened with a file, the meteorite would make an excellent handle nob. An oilcan soothed the thirsty prongs and he was ready to see if it would work.

Trembling more than before, Mr.

Peeke tried fitting the rod into the gear socket with the prongs facing to the front. The shaft went halfway into the bell-like bracket; no further. In that position it was quite useless so he tried again with the prongs curving out toward him. With some delicate maneuvering he managed to get it into place. A length of copper wire, bound tightly around the whole, held them secure.

Now, ready for the acid test, Mr. Peeke's heart was beating boogie woogie rhythms as he edged over to the wheel and turned the key. Under the pressure of his foot the starter began its captious wail. But the engine remained silently dead. "She's cold," he realized, and tried again, working the choke. The old motor responded with a slight cough which ended, once again, in silence. The third attempt brought a deep groan and the engine finally turned over.

Breathlessly Mr. Peeke gave her a little more gas and shifted. The gear slid into first with little effort and his eyes shone. Rolling now, he fed more gas. With her usual remonstrance the machine began to climb. At the curve his nerves began to jump again as, with great care, he eased the car around the sharp bend. He stayed in second gear and breathed his relief on the descent as he waited for the road to level off.

On the level he threw it into high and the auto replied with a deep purr that was a Beethoven sonata to his strained eardrums. Listening to it in exultant appreciation he relaxed his stiff position as the town peeped into view around the next bend. He had only been a mile away!

"THIS car needs a ring job," said the thin, hooked-nosed man to his wife. The car had been stut-
tering apoplectically during the last mile and a half.
"Watch the road, Herman," she cautioned.
"Ah-there's not another car on the road tonight." They hạd reached the other side of the bend in the road when the machine began to splutter more loudly than before and rolled to a dead stop. "Why-for God-sakes-! We're out of gas!" The hook-nose twitched with the realization. The lights of Pinetop Junction winked a short distance ahead.

Mr. Sylvester Peeke, in an endeavor to make up for lost time, was accelerating to fifty miles per hour. He came zooming around the bend, keeping carefully to the right, and came upon the car stalled in the middle of his lane before he saw it. Like most over-cautious drivers, he was paralyzed with fear in the emergency. He was powerless to do anything but sit with eyes agape, his foot frozen to the gas pedal. Then he received a shock which made the former seem like an everyday occurrence.

Mr. Peeke, sub-consciously muttering a last prayer, witnessed an event that would have straightened Medusa's snaky locks, had she been there in his place. For without the slightest tremor, Mr. Peeke, car, baggage and all, passed right through the stalled machine and sped on down the road! His foot came off the accelerator all right, within the next minute, because he fainted dead away. The hairpin curve ended in a straight stretch of concrete, so, regaining consciousness a minute later, he was just in time to swerve away from the deep ditch at the side of the road. He straightened his course and brought the car to a standstill on the gravel bed of the roadside.
"I must have fallen asleep at the wheel," he decided, shakily. Then he
turned and looked back up the road. There, still stalled in the center of the lane, stood the vehicle he thought he had dreamed! Shuddering, he lit his last cigar and abruptly threw it away. "Must be those stogies," he mumbled dazedly. Then went over the phenomenal experience in his mind and found the rapid succession of events too clearly defined to be a dream. He had always found it difficult to remember dreams clearly.

Mr. Peeke had worked around machinery all his life. In the factory when something behaved strangely it was immediately put to a test. So Mr. Peeke found himself engaged in the most unusual experiment of his shabby life. Looking about him for a fit subject for the experiment he chose a tall pine growing at the end of the ditch thirty yards ahead.

Feeling an utter fool, he started the car and slowly approached the tree head-on. Within a few yards of it he began to use the brake. He inched up to the tree until his front bumper touched it. The motor stalled and he smiled in gratification like a child who has disproved a fairy tale.

BUT a doubt remained in Mr. Peeke's critical mind. The experiment must be complete. He started the engine again and backed away from the tree. He would try it again in second gear. But the results of that test were quite the same as the first. The motor, crawling along in first, stalled at the impact of the slight collision with the tree. Now he felt convinced that it had been merely an illusion caused by his fatigue. It should make an interesting story for the boys at the plant.

He was sorry now that he had so impetuously discarded his last cigar.

He felt in need of a good smoke and determined to get some in the nearby town. With that thought in mind he started the engine again and, putting the gear into reverse, backed away from the beleaguered pine.

As he was regaining the highway he passed very close to a significantly battered roadsign which warned of falling rocks. His throat felt like a soggy chamois skin and he was getting drowsy again. He decided to have a 'coke' when he went to purchase the cigars in the town.

A scraping sound brought his eyes upward. Hurtling down from the palisades overhanging the highway he saw a large rock. He twisted the wheel wildly to avoid it and, instead, only managed to clear his roof as he swung around. The stone went right through his enginehood. He squealed to a stop and got out to examine the damage.

Nothing, not a scratch was evident to mark the path of a heavy missile. The paint job he had given the car a month ago was intact. Mr. Peeke kneeled and peered under the car. A squashed treetoad was the only result of this uncomfortable observation. He got to his feet and looked up the road. A few yards from the hind bumper lay the miniature boulder. He learned nothing from his examination of the rock.

Back in the car he tried to puzzle it out. He had been going smoothly along in high-. That was it! High gear! He hadn't tried it in high gear. He shifted to third gear and aimed at a heavy post protruding from the road's gravel shoulder.

Not far behind him the owner of the stalled car was alternately pushing and steering his machine up the incline. Behind him his husky wife strained uttering strong words of abuse between grunts. They reached
the top of the hill just in time to see Mr. Peeke's machine pass harmlessly through a big post in the roadshoulder. Their amazement almost caused them to let their car roll back down the hill. The man grasped the emergency brake just in time.

(1)FFICER GREER stood complacently at his post. His greygreen gimlet eyes on the alert for an out-of-town license plate, he flicked a switch. The lights changed and traffic streamed by him. No car escaped his close scrutiny. While he was thus engaged he happened to look to the right. Abruptly, he changed the lights again. A long line of autos parked in front of the traffic light and waited while one lone jalopy wobbled crosstown.

Greer was enjoying it immensely. "Some people are too damned impatient." That was the limit of his philosophy. The world was made up of people who were in too much of a hurry and it was his duty to slow them down. That had been his philosophy for eighteen years as traffic regulator (as he called it) in a smelly little yaptown.

Mr. Peeke was zooming wildly along at 70 when he came upon the traffic line. He was experiencing an exultation which was an entirely new sensation in his drab existence. He shouted aloud with joy and stepped it up to 75 , whizzing through the parked cars like a stiff breeze. Greer's eyes dilated to almost normal size at the sight of Mr. Peeke's bumper coming straight at him at high speed. He emitted a short, low grunt, half raising his arm, officious to the last, and dropped dead. Mr. Peeke and car passed on through the traffic stanchion and sped up the road.

Weaving from left to right in an
insanely unprecedented ride, Mr . Peeke was having the time of his life. A while back he had attempted to stop at a gas station but the impulse to astonish the attendant overwhelmed him, making him turn at the last minute and flash right through the gas pumps. As he streaked down the road he determined to stop at the next station without fail. His habit of caution came to the fore as his gauge came nearer to empty.

With a full tank of gas Mr. Peeke settled back, ready for some more fun. At a small roadstand adjoining the gas station he had purchased cigars and dispelled his drowsiness with a cool bottle of a fizzling coca beverage. He sat up alert, ready for adventure, caution discarded.

The early-morning sun gave little heat but his glowing cigar was psychologically warming. A beautiful, gleaming white ribbon of concrete stretched ahead, between soft green carpeting, to the top of a rise in the distance. Far to the right a wide cornfield stirred gently in the morning breezes.

Without incident he reached the top of the rise. He was now going down a steep dip in the road. Immediately his excitement rose to fever pitch. A small vegetable-laden truck was rattling along below him. Mr. Peeke aimed his craft and, like a Stuka, dove down the decline.

The farmer, taking some produce to market, was astounded by the sight he beheld in his mirrorscope. He turned on to the gravel in an effort to avoid the inevitable collision. "Why the dern fool's trying to kill me!" Before he could turn again the other car had passed through him. The wail of a siren
brought Mr. Peeke out of his trance of exhilaration.

" $C$ALLING car 33, calling car 33-" Jack and Walford stopped their discussion of the latest baseball returns and listened carefully. "-watch for a brown, twodoor coach bearing Jersey license plates, believed to be in your district. The driver is insane; he ran down and killed Officer Malcolm Greer of Millfield early this morning and caused a number of accidents on the highway. Use caution in apprehending him; he may be armed. That is all."

Officers Jack and Walford reached the top of the incline soon after Mr. Peeke had vacated it and were in time to see him go careering through a small vegetable truck, causing that vehicle to overturn in a ditch. The ditch looked like some huge cornucopia, inverse, as assorted vegetables poured into it.

Keeping a pace of fifty miles per hour, Mr. Peeke waited until the police car was almost upon him. Then, with a lightning twist of the wheel, he swerved off the highway through a clump of trees into a grassy, flat meadow. The police, unable to believe what they had seen, were stupefied, as Mr. Peeke made for a narrow dirt road which wound through the woods on the other side of the meadow. The driver of the police car shook himself out of his stupor and wheeled into the unpaved road in pursuit as the phenomenal car disappeared behind a deep dip in the road. Near the bottom of the decline Mr. Peeke swung off the hard-rutted road into a patch of woods. A few minutes later he regained the highway and continued along at his former rate of speed.

He reached the small town without further mishap. The village goon, having discarded his putrid rodent carcass of the previous evening, was standing on the corner of the crossroad. He was noisily munching a green apple with great relish. At last he threw the core at a passing mongrel and wiped his thick lips on a grimy sleeve. When the light changed in his favor he decided to cross the highway, as Mr. Peeke came streaking down from the west.

The imbecile had started across the concrete feeling secure in the glow of the green traffic light. Uttering an animal growl he attempted to jump from the path of the oncoming automobile and only succeeded in falling on his face. Joe, the steak house attendant, heard his scream and ran out of his diner and picked him up. The towsled head wobbled horribly, his neck was broken.

Three motorcycle cops arrived shortly afterward, followed by the radio car, and began to make inquiries. They examined the victim, carried him to the ambulance which pulled alongside.
"That driver was a maniac," said Joe, wiping his hands on his stained apron. And when he began to elaborate one of the motorcycle cops cut him short.
"Yeah, yeah-he's gonna get his up at the crossroads." Then he added: "The boys are waiting for him."

$\mathbf{A}^{\mathrm{T}}$
T the crossroad turnpike a barrier of logs and motorcycles obstructed Mr. Peeke's way. Behind it stood two troopers armed with submachineguns and two reporters, armed with cameras. Without slackening his pace Mr. Peeke drove directly through the impasse.

Machineguns sputtered for an in-
stant and both cameras flashed, momentarily blinding him. All instruments of destruction and reproduction were immediately afterward abandoned as their owners scurried for safety. The cameras lay ruined on the hard concrete where they had been dropped by the newspapermen as they stumbled over each other in their efforts for escape.

When he had crossed the state line Mr. Peeke hastily decided to change to a less-frequented thoroughfare which he discovered with the aid of his map. As dusk approached he decided to seek lodgings for the night. He had been almost twenty-four hours without sleep. An inviting signboard described the advantages of a stay at a tourist home which he found, by the sign's directions, two hundred yards ahead.

After a pleasant dinner in the rustic diningroom he lay down on the bed in his room to enjoy an afterdinner cigar. His thoughts turned to a plan which had been fleeting through his mind ever since his incredible discovery, a desire which a month ago he had thought was entirely omitted from his makeup. Calmly smoking a pungent cigar Mr. Peeke was contemplating murder!

He felt greatly refreshed after a good night's sleep and the full gastank was reassuring. During breakfast he had mapped out a new route, using only back roads. He had awakened with the plan clearly outlined in his mind. A new, cruel smile curled his lips at the thought of his wife, anxiously awaiting his return. His arrival would actually be too soon. Alda was only forty-one.
66.7 ELL-it's about time. What did you do-come back by pogo stick?" Thus Alda began her tirade. It was hardly lessened by
her husband's quiet observation on the negative results of his visit to his uncle.
"I had some trouble with the car," he offered during a breathing spell. Alda was struck by his strange reserve as he spoke in a low voice without any of his usual nervous habits of speech. She decided he was tired and dismissed it. He went on to tell her how he had been stranded, omitting his momentous find. "Will you come out to the ear with me?" he asked in conclusion. "I have something interesting to show you."

While he drove to a dead end street near their home he explained, briefly, the powers of his marvelous mechanism. His wife was loudly incredulous. The street was closed off at the end by a heavy concrete block but continued beyond it, unpaved. Warning his wife against interfering, Mr. Peeke accelerated to 35 .

Alda emitted a short, piercing scream as the machine rapidly approached the concrete block, and another as it passed harmlessly through. She had the feeling of floating ethereally through a cloud before she passed out.

Sylvested Peeke sat up proudly, whistling offkey. His wife sat beside him, speechless for the first time in twenty-five years. He had at last managed to impress this domineering woman.

That night before retiring Mr. Peeke went down and removed his marvel, substituting an ordinary gear shaft. The sight of the shining metal shaft was a tempting one and could, too easily, be removed by any of the petty thieves of the neighborhood.

He went over the details of his plan in his mind as he lay in bed. He must first persuade her to go for a ride to further demonstrate the new gear. Then, when they had reached the secluded road which he had found, he would ask her to get out while he made an adjustment. He saw her in his mind's eye wearing that idiotic hat she had shown him that evening. Then he would drive down the road, turn around and, gaining speed.... His head nodded to the side of his pillow. Mr. Peeke slept.

Alda Peeke listened to her hrusband's rhythmic snoring for a while and then rose from the bed, fully dressed. She tiptoed down the stairs, put on a coat, and went out to the car. Turning the key, she started the engine and drove off down the street.
"Now-where was that dead end street?" She tried to remember. "Oh, yes-Berkely Terrace-three blocks down." It should be great fun. She certainly could do anything that fool, Syllie, could do. She wondered if she would get that cloud feeling again.

## Four Star Planet

(Continued From Page 76)
I have just thought of another good reason for me to stay. Is there not a law in California which says kidnapping is punishable by firing squad? And am I not a kidnapper?"

Preparations for the return journey took place during the next two days. Hans Spael, in tete-a-tete with the undersea men of Venus, had drawn up a huge list of things he wanted sent-as he optimistically
put it-on the next space ship.
"You know," said Stan, "I may pilot that next ship back here myself. I'm going to try pretty damn hard."
"You may find yourself with a stowaway," said Lee, sticking her dark head in the doorway. "Just like in Mars Calling." Stan blew a kiss to her.

Spael sighed. "I suppose the time has come. Let us start down to the ship."

THE END

# WEB OF MOONS 

He was carried away by the music!

ALL OF MY FOLKS poke fun at me when I sit on the floor by the radis during concert broadcasts, my ears close to the speaker; none are anywhere near as interested in mısic as I. But that is the only way I can really enjoy it; the very loudness blasting at my hearing, tone-magic emphasized, verwhelming everything else. But I had never dared turn on the amplifier as loud as I wished; they said it would ..nnoy the neighbors. So that day when at last I was alone in the house, I knew my chance had come. As soon as it seemed safe, I proceeded to play my favorite record, the first scene of Chaikovsky's Swan Lake Ballet, turning up the amplifier until the impact of the sound sent my head spinning......

The first notes were like an invitation emanating from a lost dimension, calling me, wheedling. Promise of haven, peace. A call of the unknown: ot the lure of dashing adventure, but of mystery, mournful sorcery, epic splendors.... And deep within me, something responded to the music's plaint as my entire being traveled with the melody effortlessly on and on. I always listen to music with closed eyes, but now through my lids came an impression of cold, deep-blue emptiness, through which I felt myself gliding as the theme progressed.

I opened my eyes and my heart leaped as I saw the familiar room was no longer about me. Somewhere close at hand, yet infinities distant, I could hear the undiminished swelling of the music. Each harmonic burst, every wailing echo dominated me, the waves of sound bearing me farther and farther along like a leaf in the tempest. My throat quivered at the brass chords; tears burned under my again-closed lids.

I felt a tingling at my shoulders, and again opened my eyes to behold luminous yellow-almost like draperies-fluttering
behind me, buoying me like scarf-wings, whipping comet-tails. An instinctive transient fright gripped me, admonishing me to withdraw from this blue region into the callid darkness whence I came, but the melody's urge was stronger than my feeble urge to retreat. The azure became flecked with diamond points of light which augmented into great white moons, and from one to another in a vast network rayed pulsing filaments, vascular channels of fluid light.
A stupendous chorus of clear unhuman voices, as from diamond throats, emanated from these linked moons, of which the conveying music was only a distorted, ghostly echo.... In tangible waves this greater music rippled around the webbed moons, beating against me as though to force me away on its tides I knew not whither.

BENEATH me was a limitless tract of grey slime which rose and fell torpidly as with the breathing of a somnolent subterranean thing. The moonlight burned brightly on it, and crawling across it from some remote place came-trees?-snakyrooted things whose prehensile branches bore, instead of leaves, flexible lenses.... They left behind them red trails on the slime, and ribbons of thin blue vapor streamed from their topmost appendages. Occasionally they paused to feed, focussing their lenses upon the gelatinous ground, which became luminously white under the concentrated light. The sucking mouths of the serpentine roots absorbed this matter, and red viscosity seeped into the eaten places, greying rapidly under the moons' effulgence, chemically affected by it.
And the trees mated! Gynandrous, they converged in pairs or groups, pressing close together, thrusting their limbs into one enormous cluster, aggregating their lenses into a series of complex, compait forms....shud-
dering with violent ardor.... From protuberances rimming the lenses ruby liquid spurted, bursting with incandescence under the condensed moonlight.

Spent, drooping, the trees separated, and the radiant matter drifted lightly down to the slime, burning fitfully as the trees moved away indifferently.

Apparently these flickering radiances fed, for gradually they grew, dulling, becoming opaque, substantial-thrusting out probing roots, developing limbs, wandering like their parents. They snailed onward out of sight, all of them.

Silently, a phosphorescent green river raced like a bolt of furcate lightning over the green wastes. It was composed not of water but of myriad tiny luminous crawling insects. A conscious river, altering its tortuous course at will, small streams deviating from the main body and meindering erratically, then rejoining the general current. This river's end drew into sight, flashed under me and into the distance, leaving fastgreying red paths on the slime.

The moons music assailed me; simultaneously I felt those man-measures, which had carried me so long, cease, leaving me without a link to my own world-helpless against the inexorable tide of the lunar melody, which, bursting more loudly, swept me higher, through an interstice of the circulatory web, into blue infinity. And there it left me; fading ripples of it would lap me, but were too dissipated then to sweep me farther.

I floated aimlessly in the void, it seemed for ages, less a body than a mind, aware of neither hunger nor thirst nor ill of any sort other than a dreadful sapping weariness.

There was no way of reckoning time, but after an eternity of loneliness and self-boredom, I heard a glissando of mellow tintinnabulations. A troop of small stars flashed toward me like a scattered handful of sparkling white gems, whirling in interweaving dance of enchantment, tinkling glad clear tunes like the babbling of crystal brooks. The joyous, youthful essence of their song
so charmed me that I forgot my weariness and vocally ventured to imitate it.

At last they broke their circle and swept away, single-file, out of sight, diminishing with distance.

For a while I hummed their song, but with every repetition it lost some of its starry quality and gained a-human-ness, earthiness, animalism-until it impressed me as no longer beautiful, and I was silent.... Wearily the sluggish ages passed.... in the illimitable blue solitudes.

Eventually I heard the man-music, again like a summons-its vibrations piercing the moon-net, receding, drawing me with it. Its power increased with every unit of retrogression, dragging me back under the moons, over the wastes of slime-all in a fraction of a second. Wind tore at me, racketing in my ears, drowning music of both moons and man.

In a flash of cataclysm, of cosmic pandemonium, the moons, ;ostled out of their places by my abrupt pasage through their web, strained apart, snapping their pulsant, filamental arteries. White, searing drops of blood of light oozed from the severed ducts, hissing as they fell, and splashed on the slime, which heaved torturedly. The crawling trees reared upon their writhing roots, flailing their lensed limbs, and the phosphorescent rivers halted suddenly, piling into swiftly disintegrating mounds.

The rain of light-blood thinned and ceased: the moons dimmed and plunged earthward lusterless. As they touched the tempestuously tossing slime, it shrieked stridently, deafeningly-cosmically! An outcry voicing all life's inherent dread of the horror of pain and death, which arose from all sides, like an auditory vise, tightening upon and crushing me. The blue chaos was wiped away by utter blackness; the shriek weakened, ceased.

I opened my eyes-shut them, dazzled by daylight, and opened them again, but cautiously.

My brother was standing over me, shaking me, calling my name....and it was I who had screamed....

-she was "space-waif, borne free between the worlds, and the jewel was her meteoric steed which laughingly she rode astride as other wails clustered about her-

## PASSAGE TO SHARANEE


#### Abstract

A jewel that held a strange fascination and aroused atavistic desires . . . a mass of matter plunging recklessly through space . . . a lovely woman who saw beyond the vision-range of others ... and the unscrutable peron who wanted passage to Sharanee. Here is a novelet which will grip you with the spell of vast distances and secrets older than time.


## by CAROL GREY

Illustration by Hannes Bok.

THE STARS are flecks of white sand sprinkled over a velvet gown, she thought as she stood by the port, her eyes searching the trackless space-deeps outside the tiny ship. She had never been away from Earth before. Somewhere behind her (or was it below, or above?) it spun, faintly glowing, an impossible balloon in a dark room filled with fireflies. Only, her thoughts modified, it must be a phosphorescent balloon. Perhaps if she reached out far enough, she could touch it, send it bouncing away on a tangent.

There were no two ways ahout it. For all the strangeness and gripless terror of it, space-flight was phenomenally unreal. She could never believe that, at some abrupt point, she wouldn't arvaken to find herself back in her apartment in New York.
A faint cough at her side snapped the fine thread of reverie. She turned, half resentful at the intrusion; half glad to see another human being.
"Impressed, miss?" The speaker, she saw, was a somewhat overgrown college boy with a sardonic air. No, that was wrong. The second impressions swept over her, correcting, discarding. This was no boy. Perhaps on Earth, or in Sharanee, the Mars port whence came her summons, the youth in him would be dominant; but here in space he was hard, ageless, sheathed in a flexible calm.

She smiled faintly, shrugged her shoulders a bit. "I'm sorry, Mr. Crane, but I just can't believe it." She nodded to the scene beyond the port.

He nodded. "Few do. This is your
first trip out. After you've made a half dozen or so you'll begin to compromise with your reason and end up by wondering whether this, or the planets be the illusion. And when you have come to accept this, you'll never be able fully to believe in the security of Eatth (or Mars) again; every little elevator trip-any little thing at all and you'll expect the planet to go bouncing out beneath you. Once space gets in your blood, it will never let you free."
"Is that the way it is with you-you don't feel right unless you're somewhere between worlds?"
"In a way." He frowned slightly. "And yet that isn't quite the right answer. I keep on feeling that I know what it is, like a word that's on your tongue but can't be spoken.
"I came to tell you that the skipper wants to see you. I think we've found your jewel."
"Oh!" A ripple of delight ran through her, even while she half wondered at it. Jewelry really meant nothing in this day. She'd read of how people had gone mad over it in the old days, and of the well-nigh incredible crimes that had been committed for the possession of it.

But this-thing-was different. It had been totally unlike anything she had ever seen before. There it had been, staring out at her from a little shop window, and she had known immediately that it must be hers alone. A fascination and a secret lay within the depths of it; it called to her and she responded. Strangely enough, the shopkeeper had apparently thought nothing of
it, for he had asked next to nothing for it. "Where was it-found?" she asked.
"One of the crew brought it in. We checked up rather carefully and it is definite that no one took it from you. We set a trap for a possible thief, and no one bit. Frankly, I can't see why anyone should care about it, miss, but it's your property, so we're doing what we can to ensure its safety."
"Thank you," she murmured. He nodded pleasantly and led the way to the control room.

CIAPTAIN VERNARD, Crane noted, was somewhat the worse for lack of sleep. Could the old man have an inkling of what was up? Certainly the silly affair of Miss Holloway's jewel couldn't be bothering him. Quickly Crane ran over the events of the past few days, since the moment he had come to his decision to take the ship. Had there been any overt moves? No, he was quite sure there had not. He sought the skipper's eye.
"Is there something wrong, sir?" he asked quietly.

Vernard looked up. "I've a hunch," he replied. "You come to believe in them after you've been a spaceman long enough. There's something wrong on this ship."
"But this ridiculous little bauble," protested Crane. "Surely, you can't be worried over it. Anything might have happened. Perhaps Miss Holloway lost it some time before it was missed.
"It doesn't look valuable-in fact, it doesn't look like a jewel at all. Benson is probably telling the simple trutt. when he says he found it in the passageway, put it away intending to bring it to you the moment he went off duty, and forgot about it until today.'
"I'm not doubting Benson's story," replied Vernard. "It's something far less tangible than. any trinket. But we can't arrive in Sharanee any too soon for me."

We'll never arrive in Sharanee, thought Crane. Never be bound to this dull, tedious inter-world traffic again. We'll be free, free to wander the reaches of space as we choose, taking what we want from whatever source is convenient, raiding ships and stations if necessary. Like the corsairs of old. Vernard's next words interrupted his thoughts.
"You may think me arriving at my dotage,

Mr. Crane, but this is an order. Keep adert. Be on the lookout for any untoward occurrences and report to me anything-anything, mind you-no matter how trivialthat is not exactly as it should be. Perhaps my hunch is wrong; perhaps not. But there's something strange on this ship, and I've got to find out what it is before it becomes dangerous."

The captain was already in a dangerous state, decided Crane. But he couldn't afford to strike yet. "I might suggest, sir, that Miss Holloway's presence is somewhat irregular. Could this be thi cause of your premonitions?"
"Miss Holloway's presence does admit problems," conceded Vernard. "But this is something entirely explainable. Miss Holloway's family is high in Martian diplomatic circles; for some reason not to be sought after by us, they want her with them immediately. It was urgent th: $t$ she take the first ship out, and we were it. No, Crane, what worries me is not anything as tangible as Miss Holloway; it's something elusive, something I can't lay a finger on."
"Any further, specific orders, sir?"
"Not at present."
Crane nodded and left the control room, his eyes darting up ai.d down the passageway. The coritrol room was so situated that it could be taken with ease if the attack were a complete surprise; but if the defenders were prepared, it would become a difficult task. He glanced at his chronometer. Sterling would be off duty now. Whistling abstractedly, he made his way down to the crew's quarters, tapped on the men's door.

## 66 NY REPORT?" Crane asked as

 the heavily built, blond man closed the portal behind him."Nothing, sir, except that we're ready any time. We've managed to find out just who is with us and who isn't.
"It's strange, sir. Here I've been a regular spaceman for years, perfectly satisfied with the routine; no complaints about the pay, the food, the work, or the length of some of the trips. And now, suddenly, I want to be free of it. Not free of space, sir; free to roam around from planet to planet with a crew who feel the way I do about it-just as you, sir. I can't understand it. Neither can the rest of us."

Neither can I, thought Crane. Lord knows if anyone had told me a week ago that I'd
be planning mutiny, and perhaps the death of men, so I could become a vagabond in space, I'd have thought them mad. "We're just fed up, Sterling,' he replied. "It took a long time to get that way, but we finally reached the point where we're ready to do something abcut it."
"When do we move?"
"After we've checked at Lunar Station. Then by the time the ship is missed, we'll be safely away; they won't know where to look. Even if they did know, it would be a pretty nearly hopeless job finding us in space; but we take no unnecessary chances.
"And you, Sterling, pass the word on. There must be no overt moves of any kind until we're ready to take the ship. It has to be done quickly, and in one stroke. The skipper's suspicious as it is."
"He suspects?" Sterling's voice was frightened. "You mean someone has given it away?"
"No. He doesn't know what's wrong; he just thinks something is wrong." And, Crane added mentally, I think he's right. There's something strange on this ship.

The other was silent a moment, then, "You know, sir, there are some who think that girl's a jinx."
"Do you?"
"I?" The man laughed heartily, easily. "Not I, sir; I'm not superstitious."
"Do you know who?"
"Gerhard and Julian to my knowledge. They're old hands. Perhaps others; I'll find out by the end of the next shift."
"Good. We must know who can and who can't be trusted. A superstitious man is a dangerous man; one who is likely to become afraid and betray at any moment. Find out who these weak links are and we'll purge them. I think it would be best if they fell in the battle for the ship; there'll be some loyal to the skipper, you know, and we can't expect to take control without having a little blood spilled."
"Right you are, sir. But what about this girl. You don't have io be superstitious to know that, with all of us, one woman would cause trouble."

Crane starea into emptiness for a moment. "It's unfortunate in a way, but we'll have to let her go. Put her and the captain together in a lifeboat, if he's sensible enough not to resist. If not-some loyal member of the crew who survives."

## CHAPTER II

THE FACETED THING lay upon Mona Holloway's smoking stand set close to her bed, mysterious, elusive. As she tossed in the web of dreams, something of it seemed to enter into and become a part of her; yet what it was, even in that unrestricted state, she could not know. She dreamed of Earth and the jewel was a second moon in the sky, filling the expanse of the azure; she walked dark and secret paths and the jewel was a will-o'-the-wisp leading her on into forgotten places; she was a space-waif, born free between the worlds, and the jewel was her meteoric steed which laughingly she rode astride as other waifs clustered about her, and, last, she was a woman immortal searching through the labyrinth of time for a secret, and the jewel was the portal to each new time-lane.

Brighter, swifter, swirled the visions and the hidden desires of her. And always the jewel was there, sometimes erritting whorls of mist that whispered a soundless summons. And just before she awoke suddenly , filled with unreasoning terror, a final dream stole through her, a dream which, almost instinctively, she knew was one that the thing did not mean to send.

This last dream was very clear, sharply etched. She was walking down the corridor to her cabin on this ship, the Moth, and suddenly the thought came to her that she shouldn't go right in, but should open the door barely enough to see within, and watch. She hadn't locked her door, so this would be fairly simple.

As she stood there, leaning against it, trying not to breathe loudly, her eyes glued to the tiny crevice, she heard someone coming. The impulse to slip inside the safety of her cabin overwhelmed her. But-wait. This had bappened before. She knew it had hap-pened-this time, she would keep her eyes fixed to the vantage point and see what was happening within her room.

She could see the bureau in her room. The jewel was resting on it, she gasped partly in delight and! partly in fear. For it had been lost. She watched it, gazed deeply at the weird radiance of it, one which no one else seemed to notice. And-it was gone.

With a half-stifled scream she swept into the room, unbelieving. No one was there save herself. Everything else was in order -wait, hadn't she asked them to replace
that broken stool? Annoyedly she put through a call and waited until a knock came on her door and the offending bit of furniture was taken away.

That was all. Now, just as suddenly she was awake, the last dream still clear in her mind. What was the meaning of it? It corresponded exactly to an occurrence of a few days before, except for one thing. She had not actually seen anything from without her door; she'd slipped inside when she heard someone coming. Then, after the inexplicable fear had gone away, she'd noticed that the broken stool had not been removed. From that point on the dream again mirrored reality.

But, the jewel. She had lost it the first day out, and Captain Vernard had just returned it to her this evening. One of the crew had found it, hadn't thought it of any consequence and had forgotten to turn it in right away as was his duty. Captain Vernard had apologized, and the offender had been reprimanded.

She sat up suddenly, clutching her breast, trying to still the hammerlike pounding of her heart. Faintly in the darkness, the jew. el on the stand beside her glowed, shimmered, glowed. With a sudden impulse she seized it and clasped it to her. A spasm of grief shook her and she fell back upon the bed, sobbing uncontrollably.

INN THE crew's quarters, the man called Benson leaned forward confidentially, his voice falling to a whisper.
"I wasn't exactly telling the truth when I told the skipper I'd forgotten about the girl's jewel. I had it right with me all the time until suddenly I got the feeling that it had to go back. But all the time it was nestling there in my pocket, I could feel something whispering to me-and then I'd dream nights."

Sterling nodded. "So did I. So did the rest of us, eh?"

A low chorus of assent greeted him.
"There's more queer things than a jewel on this ship," spoke up Forrester. "The Moth has suddenly accumulated one newly repaired stool that it never had before. The other day, we got a call to take a broken stool from the girl's room for repairs. Not more than an hour after Gerry brought it down to me, in comes the same call again, and down comes Gerry with another stool exactly like it. So I fixed the two of them." The speaker sucked on his tobacco-tube a
moment, then turned to the tousled-headed youngster in the corner. "Did you take both of those stools back to Miss Holloway, lad?"

The gangling youth pushed his cap back on his head and stared. "Cripes, no. When I went to look for them, I could only find one. And no one had taken the other one up to the jane's room, either. Thought you'd taken care of it yourself."
"The damn skirt's a jinx," muttered the slim, dapper man sitting on the bunk. "When we take the ship, I say shove her into a lifeboat and cast her off. Give her what she needs to get to Lunar Station and to hell with her. Women are all jinxes."

Sterling glared. "We'll settle the problem of the passenger later. In the meantime, it's understood that she's to be treated with respect-and you, Julian, it you come in contact with her in any way, watch your step. You know how women areif you make a break, she's likely as not to be fluttering into the skipper's room with tales. The old man s got the jitters as it is."
"Don't worry about me," growied Julian. "I've been around. I treats 'em with courtesy and clears away fast as soon as I can. Women are snakes, all of them and harder to kill than any cat. All I'm asking is that this one be got rid of as soon as possible. Then we'll be free, and not until."
"Free!" whispered Benson. "Yes, that's what we'll be. All of space for our own, and all of time to wander around in it. No more routine between Earth and Mars. We ${ }^{-1 l}$ have to work, but we'll be doing it for ourselves, and we can get together and decide today's a holiday if we want to, and no one can say, 'Get back to work.' We'll be free.'

66 IRECT call for you, sir," said Crane, moving aside for the captain.

Vernard spun the dials of the telescreen until the image was clear. It's odd, thought Crane, that nearly every person has to make some little shift before the screen is quite satisfactory. He stopped musing as the image of Altmeyer, chief of Lunar Station, appeared.
"Vernard? Got a special request here for you. Can the Moth accommodate a passenger? There's a person here who wants , passage to Sharanee. Claims it's urgent."
"We have one passenger," replied Vernard. "The Moth could accommodate a
couple more if necessary, but I want to see the applicant first. We're not a liner, you know; I can be choosey if I want."
"He's a rather odd duck," confided Altmeyer, "but he seems to be all right. Most amazing conversationalist, captain, most amazing.'
"Let's see him."
The station chief turned away and called to someone outside the line of vision. For an instant only the room and apparatus was visible, then a man stepped in front of the screen and bowed slightly.
"Captain Vernard?" His voice was well modulated, refined without being srobbish, bearing the vaguest trace of an indefinable accent not unpleasant on the ears. As he straightened up, Vernard saw that he was apparently entering middle age, well-built, seemingly forceful in personality, and rugged in appearance. There was more to him than met the eye; this much Vernard gathered at a glance.

But there was something else, too. Something Vernard could not define, yet which told him that this man was not exactly what he appeared. Vernard felt, almost instantaneously a commingled respect and dislike for the stranger.
"You probably haven't heard of me before, captain. My name is Strachey. Without going into purely private matters at the moment, I'll merely state that it is vital that I take passage to Sharance on your ship. And I assure you I can make it worth your trouble."

Vernard hesitated, thinking of purely private matters of his own, and in that moment lost his chance.
"Are there any objections to this procedure, sir?" asked the stranger.
"I'll consider it, Mr. Strachey," he replied. "We'll be docking ai Lunar Station in about half an hour; we haven't much time. Are your effects ready? Papers in order?"
"I am quite prepared, sir."
"Very well, then. I shall deter my final decision until I have examined them."

Vernard closed the interview with the conventional salutations, snapped the circuit, and turned to Crane. "The Moth," he observed, "seems to be changing its character. Perhaps I should apply for a straight passenger license-urgent cases only." was the Molh eased its mass down into
the waiting cradle on Lunar Station and routine checking of cargo began as Vernard, Crane, and Altmeyer exchanged small talk and discussed curtent events. A brief period of chart-examinations, then the stranger's papers were checked, approved, and required supplies were loaded on. Deep within himself, Crane fumed at the problem this new addition to the 'Moth's personnel added, as the outer doors swung shut and the pilot slid on the power.

In her cabin, Mona Holloway slept dreamlessly, her empty hand lying open outside the blankets. There was no glow cmanating from the nearby smoking stand.

## CHAPTER III

"YOU'VE traveled in space a great deal, haven't you, Mr. Strachey? Tell me, does all this," Mona indicated the visible cosmos with a sweep of her hand, "seem commonplace to you now?"
"One does become accustomed to it. Yet I wouldn't say it's commonplace. That would imply that you can ignore it. No one can do that.
"There's beauty, mystery, and terror in space, Miss Holloway. You cannot separate the three; they all belong together, fit perfectly one into the other. At times a sense of one seems to flood you, but it never completely blankets out the other two. No matter how breath-takingly lovely a particulas view from one of these ports may be, you can. never but feel a sort of-broodingquality about it, and perhaps lurking fear hiding just behind what attracts you.'

She gazed out into the velvety deeps again. "But what is there to harm us? I mean, deliberately. Of course I realize there's danger-if anything untoreseen occurs, we are helpless and the chances of rescue are never very good. I know that. But you implied something else."
"There are so many things you do not understand-or know," he whispered, half to himself. "So many things that I do not know. It would not be so bad if the danger came from something that was trying to hurt us. Then it could be understood (even if only after great difficulty) and combatted. It's the blind, impersonal forces-
"Consider a great mass hurtling through this darkness, a mass itself dark and well nigh indetectable because of properties which make it outside of your instruments ${ }^{\circ}$
ability to discover. And you want to go home. But this blind hurtling mass, which has never heard of you, can in a single instant shatter you completely-or, perhaps it can just as easily help you."

Somehow she knew that he was talking to himself. For an instant she thought she saw somethin ${ }_{5}$ lonely and yearning in the man beside her and her hand reached out almost unthinkingly and grasped his. "You're-homesick?" She was half afraid he would be offended.
"Yes. It has been-a long time."
"How long?"
He gripped her hand more firmly. "Too long. Much too long. Come." He turned away, taking her arm in his easily as they started down the passageway. "You are tired, Miss Holloway. Shall we talk again later-tomorrow?"

She dreamed of the jewel again that night, but this time it seemed to bear a faint resemblance to a human face. The face of Strachey. She was standing on a small asteroid in space and the Stracheyjewel was a great planet, filling the entire vista before her.

AFAINT tapping on her stateroom door aroused Mona. Brushing aside the shards of hei dream, she sat up, then slipped into her dressing gown and hastened to the door, opening the recognition-slot.
"Miss Holloway," came a familiar voice, "get dressed quickly and join me. There's danger."

Something in Strachey's tones left her without doubt as to his good faith; she dressed quickly and emerged. Before she could form the question on her lips, he had pressed his fingers gently over her mouth and was leading her away, up to the deserted deck where they had conversed earlier in the evening.
"Is your chronometer running?' he asked.
"Of course. What has happened?"
For an instant she felt that his eyes were literally piercing her, stripping, not the clothing, but the flesh from her, driving deep into the very atoms of her searching for the dead center of her being. For an instant the scene before her blurred, and she thought she saw the Strachey-jewel poised in mid-air before her; then sanity returned, as his calm tones filled her ears.
"You strike me as a particularly levelheaded person, Miss Hollowaj. That is why I brought you here, and that is why I shall
leave you here. Alone, you understand. You are to do nothing, to see and hear nothing for approximately three quarters of an hour. At the end of that time, you will return to your stateroom and gather your belongings together, preparing to leave ship.'

The man was mad, ciearly. She stifled a gasp, remembcring his opening words; she must continue to strike him as "particularly level-headed." She looked at him, as if seeing him for the first time, her eyes sympathetic. After all, how could she expect to know this man after but a single day, regardless of the affinity which had seemed to spring up between them.
"May I know why?" she replied softly.
A faint explosion down the corridor answered her; she stiffened, ner hands clasping the rail. "There is your answer," he murmured, nodding in the direction of the outburst. "Mutiny."
"What will they do to-us?"
"That is what I must discover. You will be safe here because, even if they have time to look for you in the next hour or so, they won't think of this place. It doesn't make sense for you to be here where anyone coming along might see you; I know how their minds work. They'll expect you to be hiding. So, what you do, : just stay here in the shadows, and don't make any noise. I'll be back."
"Are you going to take part in the-defense?"
"And be filled full of missiles so that I resemble a sieve? No. Neither is the captain, unless he is a total fool. And he can't hold them off ..lone, even if he tries."
"But-what about Mr. Crane?"
"The first mate? He's busy-very busy leading the attack. Now let space see what you're made of until I come back."

She clasped his hands suddenly. "You will come back?"

He nodded, then swung away abruptly, disappearing into the gloom. She watched him, a sinking feeling stealing through her. She must wait alone, in the dark. And as she watched the faintly luminous dial of her chronometer new mysteries popped into her head to torment her. How had Strachey known about the mutiny? How had he found out that Crane was leading the attack? Or was it Crane?

Mutiny-it seemed so-obsolete. Like that strange, horrible practice men had engaged in for centuries until the world fed-
eration was established, and, as everyone knew, the history of man begun. What was it-this practice which ran through all the dealings of the dawn men, right up through the 20th Century? Oh yes, that was ita little word: war.

IT DID not occur to her to question Strachey's simple contention that she could return to her stateroom in safety when the allotted three-quarters of an hour was up. Despite the questions which flooded her being, she felt an indefinable security in his words as she hurried along the corridors to her stateroom and hastily slipped in. Nor again did the prospect of abandoning ship trouble her-beneath all the puzzlement remained that unshakable belief in him to see her through, not only for her sake, but because he needed her. Intuition supplied that last kernel of information; Strachey's need of her was not the simple psychological need of a man for a woman in time of stress; it struck to the very core of all this mysteriousness, a vital, cosmic thing.

Beyond this certainty he could not, subconsciously would not, think. Hastily, carefully, she packed her personal belongings, taking only the bare essentials. A knock on the door sent her flying to the recognition port. Eagerly she slipped it aside, then the brightness slipped away.
"Oh," she said disappointedly. "You!"
"Please open the door, Miss Holloway," came the voice of Crane. "You are in no danger unless you bring it on yourself by foolish attempts."

He looked older, she thought, as she opened the door silently; the boyishness she had first seen was gone. Perhaps it would come back again some day when all this was only a memory, but now it was still too stark, too abrupt a cleavage with all he had known and done and thought in the past. She felt sorry for him.

He looked around at the scene of preparations for departure, a puzzled expression on his face. "Has someone else been here, Miss Holloway?"
"What do you want with me, Mr.-or is it Captain Crane?"
"Titles don't matter now," he replied softly.
"Why did you do it?"
"I had to. Don't ask me why, but one day, not long ago, I knew that I had to take the ship."
"Is the captain-?"
"No," he interrupted quickly. "Captain Vernard is unharmed. There was a little fighting among some recalcitrant members of the crew. A couple of our men were hit; that is all.
"You, Captain Vernard, and Mr. Strachey will be given the lifeboat with full supplies and equipment to reach Lunar Station. I think the crew members who resisted will be sent with you, too. The boat must not be overcrowded but that will be worked out."

She leaned back against the bureau, her mind suddenly numb. "But what will become of you?" she gasped. "What can you and your crew do here, alone, in space? Where can you find a world to go to? And what will you do all the time in space?"

HE SHOOK his head. "I don't know. It seemed very clear yesterday-now, I don't know.
"There are worlds-beyond the edge of the explored universe. Perhaps we will go there; perhaps we will find-something. All I know, Miss Holloway, is that we cannot go on as we were before. We-chose this way."
"Mr. Crane," she found herself saying suddenly, "my jewel is gone again."
"I'm afraid it's gone for good, then. There isn't time to search. What was it to you? A keepsake?"
"No," she said softly. "I'm glad it's gone. It gave me strange dreams and made me afraid. Sometimes I seemed to think it was directing me, making me do things without my knowing why I did them."

This was striking home, she saw. "What did you dream, Miss Holloway? Was the jewel a part of your dreams?"
"Yes. It was everywhere-sometimes up in the sky like a titanic eye watching me, never letting me out of its sight. Did you ever have dreams like that, Mr. Crane?"

He smiled wanly. "I don't remember very well. Some of the men have been troubled this trip, but mine weren't too bad."
"Did the jewel whisper to them, too?"
"Yes-" his voice trailed off and fell limply.
"Is that why you did it?"
"I had to." He turned away. "As soon as you are ready, Miss Holloway, come out to the lifeboat; the party will be sent off directly.'
(Continued On Page 97)

## "What You Need. Sim. are the Latest SEX <br> 

Fred is telling Jim about "Sex Satisfaction and Happy Marriage." "Yes." Fred is saying, "I laughed, too, when a friend of MINE told me to read a good book on Sex. I, too, thought I knew it all. And I, too, had the same sexual problems that worry you right now.
"Not until I read 'Sex Satisfaction and Happy Marriage', did I realize how much joy my wife and I had been missing. NOW she no longer nags me, nor do I snap at her-because we have found HOW to obtain perfect happiness from each other!
"There's a dollar and cents side to this, too. My promotion at the office is a direct result of our gloriously happy sex life at home.'

## LOVE IS NOT ENOUCH

Many husbands and wives hesitate to talk frankly to each other about the most intimate side of married life. These couples are advised to read "Sex Satisfaction and Happy Marriage" TOGETHER.

## TELLS WHAT TO DO AND HOW

This brand-new book tells exactly what to do before, during and after sex intercourse so that no married couple need any longer remain ignorant of just how to happily carry out their sexual duties.
"-describes with completeness and frankness the marital relations in their many aspects."-'rhe Canadian Dector (Medical Journal).
"A book a.t last containing the vital information."-Dr. J. D. Griffin, (M. D.), of Committee fur Mental Hygiene
". . an enthusiastic discussion of the technique of sexual intercourse . . . plainly and simply written, with anatomical diagrams."-Publie Health Nursing.
"This book is the one to recommend."-Ohio State Medical Journal.

## READ FIRST ..- THEN DECIDE <br> 5-DAY MONEY-BACK GUARANTEE

Return the coupon and read "Sex Satisfaction and Happy Marriage" FPEE. Then, if you do not think it is worth DOUBLE the price you paid, return it within 5 days and get your money back.

## MAIL THIS COUPON NOW!

[^2]
## (Continued From Page 95)

"Mr. Crane," she cailed after him. "Is -Mr. Strachey all right?"

He stopped and looked at iner. "Yes; he's safe. By the way, Miss Holloway, didn't your jewel disappear just about the time that Strachey joined us?"
"How dare you!"' she flared. "Mr. Strachey would never!"'

He shook his head. "You misunderstand me. I was not suggesting that he might have taken your jewel.
"I just remembered something about him that struck me as strange. His eyes are very much like your jewel, Miss Holloway. They seem to have the same indefinable quality." He shuddered. "Sometimes I'm very thankfu' that I am not given to imaginative speculation."

He bowed slightly and left her in the grip of a sudden terror such as she had never known before.

## CHAPTER IV

"IDO ALL SHIPS have solar models such as this?" asked Mona. Vernard smiled. "The answer is definitely yes. All ships must have them. Without the solar, navigating Earth's oceans blindfolded from the confines of a wheelchair on the main deck would be simple in comparison. And the odds, relatively speaking, would be infinitely higher that you would actually get where you wanted to go."

They stood before the model solar system in the center of the lifeboat. Inside the great dome, varicolored globes of varied sizes rotated slowly as they inscribed their various orbits around the central luminary. "We have here," continued Vernard, "only the major factors involved. Space is full, so far as we are concerned, of minor factors. They are taken care of by the grav." He indicated an apparatus nearby, an outgrowth of the old gravitometers whose function it was to indicate the presence of any space body not allowed for in the solar.
"I've heard that spaceflight is just a mat. ter of curves."
"An understatement, yet true nonetheless. It's curves and velocities and accelerations and, just as important, decelerations. You build up to a peak, hit the dead spot, then start slowing down immediately. The tiniest delay or off-center spurt and nothing in the cosmos can keep you from missing your objective. That's why that part of it is auto-
matic; no human could possibly attain the continuous accuracy required. And even then, sometimes a ship misses. Once in a while it is recovered.'

Mona shivered. "How can you endure it? I can understand a person like myself, knowing little or nothing about it, resting easily enough. We just assume that you spacemen know what you're doing, and, except in the event of unavoidable accidents, we'll be delivered sately. But you-''
"You get used to it after a while. What I can't understand is how the men who first started crossing Earth's oceans in leaky little tubs ever managed to take it."
"I should say," broke in Strachey, "that it was the inability of the human to correlate impressions properly even to the limited extent of what it actually knows about a given subject.
'It is in this weakness that the human's greatest strength lies."
"You use the term 'human' somewhat oddly, sir," frowned Vernard.
"Merely the most scientific terminology, Captain."

I wonder, thought Mona, feeling Strachey's eyes upon her. The aftinity she had felt for him at first seemed to have suffered an invasion of something she could not describe. She often caught herself wondering what Strachey looked like when no one was present to see him.
"Can I make arrangements for passage to Sharanee at Lunar Station, or will it be necessary to return to Earth?" Mona felt that she had to say something.
"I shouldn't be astonished," commented Vernard, "if you found some sort of arrangements awaiting you at the station. I've reported the situation, you know, and they have undoubtedly contacted Sharanee by now. I hope this delay will not affect you or your family to any serious degree."
"I think it will be all right," she smiled. "What about you, Mr. Strachey? Will you be going on to Sharanee?"

He shook his head. "No. There is no need now. There are more pressing matters for me now." He turned to Vernard. "May I have a word with you alone, sir?"

The Captain nodded and followed him into the next compartment. Strachey closed the door carefully. "There is no need to mention it before Miss Holloway, but we are in a dangerous situation. I've been looking over the fuel. We are short."

## $98 \star \star \star$ Future Combined With Science Fiction

Vernard's eyebrows went up. "What do you know about these matters? I checked the fuel with Crane before leaving. There was sufficient and to spare.
"Which reminds me, Strachey. If you'll forgive my curiosity, just when did you board the lifeboat? I don't see how you could have done so without my seeing you; yet I know well enough that I didn't see you go aboard before me, nor come aboard after me."

Strachey smiled. "I saw you when I came aboard. You and Crane were very occupied with immediate problems; it's not at all unlikely that you didn't notice me."

Vernard grimaced. "Perhaps."
"It would be rather-inconvenient to doubt me, Captain."
"Quite inconvenient. Good night, Mr. Strachey. I shall check the fuel at once, and you have my appreciation, sir, if you are correct. There may still be time, in such a case, to save ourselves."

AHALF hour later, Vernard looked old beyond his years. There could be no doubt that Strachey had been right. But he, Vernard, had personally checked the fuel with Crane, inspected every container of the vital element. Now, one of the major cases was missing. What could have happened to it? Sabotage? Unthinkable. Not Crane, surely. And Strachey would not be so mad as to-but even if he were, how could he-?

They would never reach Lunar Station now; they would go on into space, tinally plunging out of the system, unless some minor factor slowed them down, or they were caught in the drag of a planetary body. He would have to check the solar for their exact course.

On a sudden impulse, he went to Strachey's compartment, knocked on the door. There was no answer. For a moment he waited, then opened the door with the skeleton key he carried. The room was quite empty.

Quietly he went to the other compartments, carefully inquiring, making sure no suspicions were aroused. Then he made a minute inspection of the little ship.

There was no doubt about it. Strachey had disappeared.

66 IT down, Kingston," said Vernard. "You, too, Stirmer. Something has just occurred to me, and I want to tell you
in order to see if you will be thinking, what I am thinking when you've heard it."

A knock came at the door. "May I come in?" called Mona.

Vernard admitted her. "I'm glad you came. Was just about to tell Mr. Stirmer and Mr. Kingston something which may be of interest to you, too. It really concerns us all.
"This happened about ten years ago, when I was first mate aboard the Vortex you probably recall her, Kingston-at a time we were docking in Sharanee. I was off duty at the time, carrying on a somewhat illicit conversation with one of the attendants. As you know, they aren't supposed to have visitors while on duty.
"There was a ship due in soon-I forget what her name was-and she was late. The lad at the station and I were speculating as to what might have happened to her. In those days, you know, spaceflight was nowhere as near as regular and sate as it is now-and you know how safe it is now.
"She came in eventually. But they wouldn't let her land. The officials were adamant about it. She could discharge cargo, but no one would be permitted to get off. It was only after nearly an hour's arguing that they finally agreed to let her drop cargo.
"That isn't the strangest part of it, though. No, the thing that stuck in my memory was that the Martians were afraid of something on that ship. It wasn't a case of possible disease, or the like. No, it was definitely some person-or thingaboard. I never found out precisely what it was.
"But can you get the significance of it? A Martian afraid of someone on an Earth ship, carrying only Earthmen? That is utterly unprecedented. We know that the whole history of Earth-Mars relations has shown that the Martians have a particular species of contemipt for Terrestrials, that Earthmen have never been able to best the Martians in any sort of bargain or wring any kind of advantages out of them. And lord knows they tried hard enough at first.
"The Martians tolerate us, that is all. Today, we are strong enough so that I think they would hesitate to bring about bad relations, but still that supercilious attitude exists." He bent forward, his voice dropping.
"I saw one of the Martian officials shortly after the incident had closed and the ship
had been turned away. The creature was beside itself in pure, undiluted terror. And it uttered some words I've never been able to check since. No Martian records list them; no Martians will talk about the subject. I tried to bring it up gracefully with a couple of officials with whom I was on reasonably good terms, and they imme. diately grew sullen and changed the sub-ject,- making it clear that I was not to refer to it again.
"That term of which I speak may be a phrase, or a single word. 'A-waim-bee.' The official I told you about kept repeating 'a-wabm-bee!' ' $a$-wahm-bee!'’ over and over until the creature observed that I was in hearing distance and shut up quickly.
"One thing more I found out about the affair. That the ship had picked up a passenger between Earth and Mars-at Lanisar Station I think it was. I got a description of the man and put it down in my journal -where I wrote out a careful record of as much as I could find of the incident. It fits our friend Strachey very well."
"Didn't you find out what the name of the ship in question was, sir?" asked Kingston.
"I did, but unfortunately my journal was damaged about two years ago, and I have only a page or so salvaged from it. I came across the remains of it this morning, which is what brought this to mind."
"Speaking of Strachey, sir, I think he's coming this way now," broke in Stirmer.
"Wait!" cried Mona. "Wait! I know!"
"You know what?"
"I know! I mean-it's not quite clearbut let me speak to him first."

There was a moment of sllence, then Strachey opened the door and came into the room quietly. Mona. Holloway stood up, her eyes wide as she faced him.
"Strachey!" she almost shouted. "A-wahm-bee! Vombis!"'

## CHAPTER V

THE thing that was Strachey smiled slightly as its eyes roved over the four in the room. They stopped at Mona. The silence was becoming unbearable, yet none dared to speak until Strachey -it-had made some sort of reply. When he spoke, the accent, heretofore somewhat strange, became almost ghastly-yet it was no more pronounced than it had ever been. But now, they knew....
"Still level-headed, Miss Holloway?"
Her chin went up. "As level-headed as any human being can be in the presence of a thing like you."
Strachey did not seem displeased. "It's just as well, I think, that this form be retained. The shock of seeing me in my true form would short-circuit your brains and stop your hea:ts. And it is rather pointless for me to take on other forms. I am not what you would call a showman."
"But-you were something else before, weren't you?" insisted Mona.

It nodded. "Yes. I was the jewel. And the extra chair. And the missing container of fuel. You were right, Captain; you did not see Strachey board the lifeboat, but you did see me."
"What manner of being are you," asked Vernard in awed voice. "Do you actually take these forms, or is it an illusion-do you just make us think you are a jewel or a chair?"
"It's simpler to make the actual change. You see, Vernard, the a-wahm-bee, or vombis, as we are known on Earth, is capable of taking any material form whatsoever. We are the super-chameleons of the cosmos. What our own, original form is, I do not know-perhaps some super-amoe-boid-who can tell? I, for example, am never conscious of my material form at all; my 'brain' is inconceivably complex to you. Suffice to say that, no matter what form I take, my voluntary brain-centers take care of my remaining in that form and acting true to that form until, voluntarily, I alter it."
"Yours is an old race, isn't it," whispered Mona. "Older than Earth itself perhaps. But men knew of you in the days before the glaciers and that memory lingered -maybe that is why I wasn't afraid of you."
"But what does it want of us?" burst out Kingston.

Strachey's face bore a sad look upon it. "I need your help," was the answer. "Wait -" the being waved away questions that sprang to their lips immediately. "Let me tell you more; perhaps that will answer your questions and save time. There is not a great deal of time to be wasted now.

66 NHE vombis is a very old race of being. We antedate your universe itself; ours is a culture inconceivable to you, one which, even after countless billions of years, is still in its early maturity. It is very difficult for me to explain this to you,
yet I shall have to warp the facts to suit an analogy which you would grasp at once.
"Conceive of cities in a distant locus in the cosmos which is the centre of vombic life and culture. Conceive of a civilization there, one steeped in traditions and customs of all kind. Conceive of a race fully aware of itself, having purged itself of all the grosser aspects of its evolution and come of age. There you have the vombi.
"Ours is the ability to take any material form we desire, to imitate that material form so perfectly that we undergo any changes which it would undergo; respond in every way as it would respond. Were I, for example, to take the form of a tree upon Earth, I would grow, expand, and be affected as any other tree. Perhaps before it was to my convenience to alter my form again, the tree might be destroyed or altered radically through its being hewn down and cut into various sections. Do not digress in your thoughts by wondering why 1 would do this; please merely accept my word that, for reasons beyond human motivation, I might. Accept that I have done so in the past.
"I have said we are steeped in traditions. That is so. Among our race, it is a tradition and a highwater mark of ethics that never must we act contrary to the nature or natural reactions of the material form we are imitating. And a second and equally powerful tradition is that never must we alter our material form when any living, sentient creature is present, or 'when so doing might arouse undue suspicion in the mind of any such creature.
"But, even as yourselves, individual vombi are not as nearly perfect as their ideals. Your race, as have nearly every other sentient race in the cosmos, have come in contact with individual vombi who cannot be said to have been worthy of the raceideal." His voice dropped. "I am one of these."
"You mean," broke in Vernard, "that you are an outcast?"
"An exile. I rebelled against what-at my precocious age-I considered the tyranny of my land and ran away."
Mona caught her breath sharply. "And now you're sorry! You want to go home."
The being that was Strachey nodded. "Yes," it answered simply.

66 S WITH many other runaways," said the creature, "my education was incomplete; I've learned many things, of course, but I still do not know how to get what I want simply. A fully graduated vombis could have solved the problem without any trouble, relatively, at all."
"But how do we fit in?"
Strachey raised his hands in a gesture of despair. "How can I explain to you so you would comprehend? I cannot, not in the little time there is left. You are but one of many factors I need, the sum of which will bring the result desired. We are now in the right spatial locus; yours are the types of brains needed-"
"What are you driving at?" rasped Stirm. er. "Are we to be sacrificed-?"
"No, you will not be harmed. I shall administer a sort of drug to you which will enormously stimulate your thoughtwaves, then direct your thoughts as I require. When you recover, you will be in need of considerable sleep, but that is all. I shall blot out of your memories, of course. anything which might, by its very presence. harm you."
"And why should we help you?" growled Stirmer. "Didn't you drive the poor lads aboard the Moth off their heads so that they mutinied and put us adrift in space? And how do we know you're telling the truth? How do we know your drug is harmless?"

Strachey grimaced. "I have done many ill things, nor was the affair of the Moth the least of them. Yet, that was not entirely my doing, for I had no intent of causing a mutiny.
"There is something about the make-up of my kind which stirs deep-hidden memories and latent impulses in the minds of intelligent oxygen-breathers. That is why everyone aboard the Moth had the feeling of unrest-in the case of the first mate, and most of the crew, it brought back a primal desire to be free and nomadic, and this they expressed in the only way they were able.
"As I said, it was not my intent to cause a mutiny, but once I realized what would happen, I saw that it would aid my plans rather than obstruct them. My only real concern was that Miss Holloway, Mr. Vernard, and one or two others came to no harm; I needed you."

He paused, looking from one human to another. "As to Stirmer's other questions,
there's no timie to go into the matter more deeply. You four are going to assist me; I shall not be frustrated now. You will merely have to make my word for it that you won't be hurt."
"Like hell we will!" snapped Stirmer, grasping a heavy metal weight in his hand. Lightning-like he hefted it true so that it struck Strachey between the eyes with an audible sound of bone shattering. The being halted for an instant, then slumped to the floor.
Mona Holloway screamed. "You're killed him! You're killed him!"
"No," came the familiar voice of the vombis from a point between the floor and the ceiling, "I am not killed." Abruptly the limp form of Strachey vanished, and, instead, there was the jewel which Mona had lost twice.
"Do not try to resist the vapor," whispered the voice, "and no harm will come to you. You, Mona Holloway. You believe me, don't you?"
"Yes," she replied. "Yes, I believe you."
From the strange depths of the jewel a mist was flowing out, mist which whirled in strange ringlets and shapes, filling the small room. It seemed to be wisping into their brains, caressing with light-feeling tendrils, but before they could struggle against the invasion of their beings, the universe had slipped away from them.

MONA came back to consciousness with a realization that everything was back to normal. The familiar form of Vernard was bending over her.
"Are you all right, Miss Holloway?"
"Yes." She sat up suddenly. "Did-he-get home safely?"
"Who?"
Suddenly she realized that the being had done even as he promised.. removed their memories. It did not occur to her to won-
der, then or later, why she alone had any clear recollection of the past hours and their events. By careful questioning she obtained from Vernard the story that the Moth had been wrecked in a meteor storm which hit them at a time their screens were not functioning, that only she, the Captain, and two members of the crews were survivors. They had put out from the ship in a small lifeboat, without sufficient fuel, but had been picked up by a rescue cruiser before their situation became serious.

She did not bother to point out what she knew to be discrepancies in the captain's story. It would pass the official eye; that was enough.

Quietly she lay back, exploring her brain for impressions. What had happened after the mist from the jewel had swept away her consciousness? She know that a great mass of strange matter plunging through space was an important item in it. A mass un. detectable to instruments devised by humans, pitiless, obliterating anything in its path.
She knew, further, that this matter would act strangely under the proper catalyst, would explode dimensionally so that the delicate fabric of space itself would be sundered for the moment, and a tunnel to the farthest reaches of space-time could be made in the aftermath. And the catalystwhat part did the thought-vibrations of four drugged humans have to do with it? A great deal, that was all she knew.

Her thoughts were interrupted by the words of Vernard. "We're approaching Sharanee, Miss Holloway." He seemed at loss for something more to say. "It has been a difficult passage."
"Yes," she smiled suddenly, "yes. Passage to Sharanee."

Like another being somewhere in the deeps of the cosmos, they were nearing the end of their journey.

One of Mr. Cummings' Most Famous Novels 'THE SHADOW GIRL'

Appears in the New Spring 1942 Issue of SCIENCE FICTION QUARTERLY


0RCHIDS to Martin Pearson! His second Ajax Calkins tale, Destiny World, took first honors in the December Future, as did Pogo Planet, first in the series, which appeared in the October book. And the yarn received a final rating of 8.3 , which is very good. Ray Cummings Around the Cniverse came in second this time with 6.6, which means it was well taken, and close on its heels, for third place, at 6.1, was a little filler which we shoved in at the last minute: Mallory Kent's Quarry. Honorable Mention goes to Morley for No Star Shall Fall and to Fred Kummer, whose Day of the Titans came out just one-tenth of a point behind the cover story. The others rated as follows: In sixth place was Les Croutch's Salvage Job, seventh, Something From Beyond by Paul Dennis Lavond, and in eighth, Space Episode by Leslie Perri. But, even though it placed last, this tale came out on the credit side of the ledger: more of you liked than disliked it. It seems as if a lot of masculine egos were wounded by the Perri tale-but ardent feminists plugged it roundly. It served to show, if nothing else, that more than just a few girls read Future and they can be stirred into writing letters to the editor at times. Station $X$ and Futurian Times retained their customary top rating, and the Bok cover came out high-though not fuite as high as his first cover. Those of you who praised it were lavish, rating it as the most beautiful cover you'd seen in many a moon; but all of you did not care for it.

COVER this time is by John Forte, who illustrated The Barbarians on the frontispiece of our last August book. A good many of you have written in asking for personal notes on our artists, so here's a bit of dope on Forte:

He's rather tall-we'd say six feet. weighs about 165 avoirdupois, has brown hair and eyes, and is 23. Single. He lives in Lawrence, Long Island, and commutes to Manhattan whenever we need him for a cover or general artwork-does his stuff at home studio. Now and then his enthusiasm for swing and Rimsky-Korsakov gets the better of him and everything else is shelved for the nonce.
He used to he all out for pen and ink. water color, and pastels in his artwork, but numerous landscape and portrait work in oils changed that. Stidied at New York's Commercial Illustrations Studios-he's a graduate of that body-went in for poster art and emblem design work but found that the supply is
greater than the demand there, so turned to other lines, among them stf illustrating.

One thing about Forte that stands out is his determination; he does have ideas of his own about drawings and covers, but never lets them get in his way when ye ed thinks differently. Ye ed may be in the wrong, but Forte believes that an illustrator must be elastic and capable of satisfying the editorial whim-and turn out a top-notch drawing nonetheless! In short-he likes drawing! He has a flare for design, and enjoys doing the fantastic things required of the science-fiction artist; his ambitions are in the direction of art exhibit and he hopes constantly to create something different and unusual in design or drawing, in view of times and style.

SoOME years ago there appeared a story by A. Fedor and Henry Hasse titled The Return of Tyme, in the August, 1934, issue of the Gernsback Wonder Stories, to be exact. Future's former editor, Charlie Hornig, was handling Wonder at that time. The "Tyme" story was a sequel to inother tale, appearing in the issue of the preceding November, and was a whimsical, humorous tale in which the character "Tyme" comes from the future to confound one B. Lue Pencill, editor of Future Fiction. In the story we mentioned above, Editor Pencill had just received a terrific galactic novel entitled The Core. It was perhaps the most amazing, wonderful, startling, astonishing, astounding, etc., thing ever conceived and written. Author was the famous stf standby, E. E. Myth.

This was published in 1934, mind you. In 1939 Charlie Hornig put out the first issue of Future Fiction. Eagerly we, just an ardent fan at the time, waited for announcements of The Core. But, alas. they forthcame not. Finally we decided, after we'd taken up the reins, that we would remedy the defect in Future at the earliest opportunity.

So, we called in S. D. Gottesman, who's one of the outstanding new stf writers of the day. He'd read the Return of Tyme, too, way back when. "Gottesman," we said to him, breathing heavily, "science fiction calls upon every writer to do his duty. It is your destiny to write The Core. It must be terrific."

And, begad, he did it.
Of course, it isn't a novel. It isn't a serial. But then, after all, Fedor and Hasse were merely writing prophetic fiction-not actial fact. We didn't want to scare them too much. Besides, Future runs all stories complete.

The Core is here; it's galactic; it's super

That should be enough, say we leaning back in our seat happily. And praying to seventeen different tribal gods that you'll agree!

$\mathrm{A}^{\mathbf{J}}$JAX CALKINS rides again. Pearson had him ready for the last issue, but there just wasn't room, sad to relate. Anyway, here is the third in the series, and we think it's up) against tough competition this time. Not that it isn't a nifty tale. . . :

EVERY now and th?n we come across a new writer who we think will be going places soon. Chester 13 . Conant fits into that category. If you are a driver, you'll appreciate the lovely possibilities of the galactic gear, even though you may not envy the home life of Sylvester Peeke.

INN OUR writeup on Forte, above, we didn't mention that we first met the gentleman through Dick Wilson and Dave Kyle, because we wanted to keep that for this paragraph. We are now talking about Wilson and Kyle. Dick recently saw the error of his ways and got himself a wife; Dave is andergoing a sort of reformation, too; he's mining back to New. York, this time, we hope, to stay.

And here is Four Star Planet, in the Wilson manner, which so many of you have raved about in the past.

TTHE Conways are comin'! We saw that 1 slogan on a publication at the Denver Convention. Later we saw the Conway crest on a story in the day's mail; this is it. We hope it's just fiction, because Conway indicates that the present war lasted until 1952. Yesterday (yesterday as we type this) there was a Black Invasion, but not out of a red disc. At any rate, we see that Conway finds that the nation survived the ten years of war:

We feel like going on a bit. It's quite amazing, but the Nipponese assault came just about the way it's been predicted in stf tales for any number of yzars. Attack without warning under the cover of peaceful diplomacy, and a smashing first blow that gave the marauders not inconsiderable advantage. Which one of the many tales will the future disclose to have been most nearly right? You and I both hope that those stories which showed the nation united in a victorious defense will have been corrected, we're ready to do :nore than just hope-but time will tell.

WHICH reminds us that science-fiction has often been dismissed by the simple expedient of labeling it "escape literature." To a certain extent it is. But escape literature isn't necessarily bad. It all depends upon what kind of escape. If, by letting your imagination carry $y$ su into the future. into distant worlds, beyond the stars, beyond the rim of time, you find momentary relaxation, there's nothing wrong with it. And, if, in addition to soothing your nerves for the moment, these visions leave you with a certain faith in the future of homo sap, of his ability to overcome obstacles far greater than any which we actually face today, then it's all to the good. Sure, it can be overdone-but what can't.

In the present crisis, we feel that a magazine like Future can be an asset to public morale. And that, as an experienced military man can tell you, is often more important than weapons.

SPEAKING of escape, Hannes Bok's little fantasy Web of Moons, should have a particular charm on those of you who are espe-
cially fond of classical music. And it isn't unscientific, either, to assume that there might actually be chords which could send a person into another world.

FTEWV are the stf fans who hitve not, at one point or another, battered themselves against the old time-tiavel paradox. TwoWay Time, however, presents some aspects of the subject wed never seen belore. It's a lovely mess, and we think you will enjoy it.

$0^{I}$LD MAN MARS presents a picture of the distant future, when the human race has altered a bit. You'll find the old man quite an interesting creature.

BASIL IVELLS is a new author for f'uture, though not a new author, or an entirely new name to you. You've seen some of his letters in Station $X$, and in the letter column as prior to our April, 1941, issue. He's pretty busy in deiense industry these days, but still has time to bat out an enjoyable tale now and then. Such as The Rebel Slug.

AND finally, Passage to Sharance. A strange, engrossing tale, we found it. In some respects it was not all we had hoped for, but there was enough of what we want to make it a "must accept." Hannes Bok apparently got the spell of the story, for his drawing for it rates with us as among the best he has ever done. Let's hear what you think on this.

THE letters we've been receiving on the new Winter 1941-42 issue of Science Fiction Quarterly seem to indicate that it's the best yet. Which isn't surprising, because we thought it was rather good. too. From the Bok cover, symbolizing Ray Cummings' famous Into the Fourth Dimension, through the seven complete stories along with it.

There are two novelettes: Sir Mallory's Magnitude by S . D. Gottesman, and The Yeav of ~niting by Hugh Rayniond. Drawings for these are by Forte and Dolgov respectively. (Dolgov also did the double-page spread for the Cummings novel.)

In the short stories, we have Power Plant, by Lee Gregor (illustrated by Hunt), Ephony's spectacles, a sequel to the amusing Femintoun, Mars, by Clarence Granoski (illustrated by Knight), Baby Dreams by Alan Warland (illustrated by Knight), Caridi Shall Not Die, by that popular new writer, Walter Kubilius (illustrated by Bok), and When Anteros Came, by James Blish. There's also a new department, Prime Base, where everyone can spout about this and that informally. This issue of Science Fiction Quarterly is, all in all, one you shouldn't miss; you can get it at your newsstand for 25 cents-if it's out of stock there, you can send the quarter in stamps, coin. or money order to Science Fiction Quarterly, 60 Hudson Street, New York City. and ask for issue No. 5, which this is.

Which is about all for our end at the moment. We'll just mention that. by your votes, the Dolgov double spreal for Around the Liniverse went to J. S. Klimaris. and turn you over to

## A SADIS'R'A CRITIQUE

Gentlemen: You must be gloating hideously over the various laudatory letters undoubtedly received praising the art worlc in your magazine. Far be it from me to add to such a disgusting spectacle. but in the interests of honcsty 1 must throw in $m y$ unimporlant gushings before $I$ turn to the more repulsive aspects of your rag and earn the ominous title.

Boli, the wizard of shadow.s, is definitely a
(Continued On Page 105)

from your ornn impressions. You hare satis
and Canada SEND NO MONEY WRITE TODAY SEND NO MONEY $\begin{gathered}\text { WRITE } \\ \text { BOOKIET } \\ \text { TODAY } \\ \text { and } \\ \text { for } \\ 1 A T E R I A L \\ \text { ERER }\end{gathered}$ f. B. CLEVELAND DENTAL PLATE CO. Dept. 28-C:2, East St. Louis, Ihinois

## SEX SECRETS

127 pages of Vital, $m$ or $\begin{array}{ll}1 \\ \text { int }\end{array}$ intimate inthet you must know to get the most ont of love, life, marriage. Plainly cold in our two amazing booklets "Man's Sexual Lifo" and 25\% "Womanhood." With conñdential list for adults only. All for 25 NATIONAL BOOKSELLERS DEPT. 8 OWOSSO, MICH.

## (解 <br> Banish the craving for tobacco es thousands have. Make yourgelf free and happy with Tobacco Redeemer Write for jurions effect of tobacco and of a treatment which FREE THE MEWELL COMPANY BOON 14\| Clayton Sta., St. Louis, Mo. <br> 'How to Draw From the Nude'




The beginner or advanced artist, who wishes to draw the female form, will find this book helpful. Contains 34 poses, in varying positions demonstrating proportions, balance, action, anatomy, etc. A selected group of fullpage studies of nudes with a corresponding line - drawing on facing page with instructive text. 68 pages - $81 / 2$ x 11 - spiral bound. Send $\$ 1.00$ or C. O. D. plus few cents postage. MONEY BACK GUARANTEE if not helped.

```
KNICKERBOCKER PUB. CO. (Dept. N-IO-D)
98 Liberty St., New York, N. Y.
Please send me "HOW TO DRAW FROM THE
NUDE.'
O I enclose $1.00, a Send C.O.D. I'll pay $1.00
    send prepaid. plus postage.
Name
Address
\(\qquad\)
\(\qquad\)

\section*{GET ACQUAINTED CLUB}

If you want a "wife," 'husband," or "sweetheart," tell us your age, description of your "ideal," and by return mail you will receive sealed particulars of one of the oldest, most modern Clubs, in America, representing many wealthy educated members.
R. E. SIMPSON Box 125l
C. S. A.

\section*{Asthma Agony}

Don't rely on emokes, sprays and injections if you suffer from territle recurring. choking, gasping, wheezing spells of Asthma. Thousands of sufferers have found that the first dose of Mendaco usually palliates Asthma spasms and loosens thick strangling mucus, thus promoting freer breathing and more restful sleep. Get Mendaco in tasteless tablets from òruggists. Only 60c. Money back guaranteed unless fully satisfied.
 ues, more than 200 guality productes, full or spare time. No erDerience necessary. Write for FREE \(\$ 5.00\) Assortmont ar Product NOW. ZANOL, 4923 Monmouth, Cincinnati, 0.


WEAR IN YOUR OWN SHOES lon't be oubarrassed by shartaess. Easy
to anjear taller-INSTANTLY! Aonazing (n anjear taller-INSTANTLY! Acaazing HITE-BILCNERS fit into your own shoesmake you appear TAJLFR! Comfortable - posure imploving - COMPLETELY INVISIBLE. No Strefching or ExerNothins shosvs-no thick oles or heels. AND THET COST SQ LITTLE: Send No eney-just your name. address and shoe size. Pay postman amount plus postage when he delirgr6 CONFIDENTIAL, Dlain-wrapped pactage. (Or sead money now, and sare postage.) If net delighted return in 5 days for refund of money paid us. SO-LO WORKS, Dept. HB-301, 3317 Madison
 90 DAYS TRIAL TEST THEM EXAMINE THEM
Wo make FALSE TEETH for you EY MAIL from \(G\) your mouth-impres GUAR A A NTEEE Of orossion material, diresFREE tions. Booklet of
Write today

\section*{PARKER DENTAL LAR.}

127 N. Dearborn St., Dept. 18-C, Chicago, IIf. Men Make \(75 \%\) Profit
Bus and sell personal needs. drug undries, yazor blades and otc Good side line. Fend for free catalogue. Edwards Products Co.. 1918 Humboldt Blvdi. Chisaso, Ilf. Dept. H.


Complete Big 72-page Blue Book Catalog - DICE。 CARDS, inks, daubs, layouts, counter games, punchboards, checks, magician's specialties. Many novelties and amusement articles NEVER BEFORE HEARD OF-Write today.
K. C. CARD CO., 3231 West Washington Street, Chicago

\section*{Station X}
(Continued From Page 103)
gilt-edged asset. Il is style fits in particularly well with sf, being fascinatedly futuristic and fantastic. I number Hannes among your rather few good points.

But art work should be secondary to fiction. And thi.s department is where the readers turn green with nausea. Firstly, I suggest that Mr. Cummings be labelled with the Sign of the Flying Bull and squashed back into the garbage receptacle from which he sprung. The last excruciating straw was Around the Universe, a cosmic farce that marle my face run the spectrum's gauntlet. It was a barefaced fantasy and its stilted style was antediluvian and overdone. As for Day of the Titans, it lacked any sort of scientific explanation of the time-cone or plot. It had no ending, at least with the unique quality that saved the rest of the story. Besides these points, it had no concrete climax and-final horror-the stereotyped scrency scientist was there, squatting in his tent. But upon microanalysis, we find coyly hiding good features in the story, such as the brisk clialogue, and the study of evolution as dependent upon environinent.
After discussing these longer atrocities, and washing out my mouth, I find a fiake of gold in the ton of anthracite, the short stories labelled in the contents as "unusual." Calling them unusual is like saying shakespeare understood people rather well. My dear Ed., those stories are typical of the deєp mauve type of stories turned out by up-and-coming modernistic writers; their stulf is, I think, the best liked in science fiction, and for them alone I buy your damn rag any time, no matter how much Cummings obscenes the rest of it. Tho.se stories have the visionary, retrospective quality so lacking in the manufactured tripe shovelled by the established writers and sired by the automatic turn-the-wheel-and-get-a-plot-machines. Uise a pair of razor-edged scissors on the latter, O Ed., and get more of that fresh, sparkling stuff with the devilish psychological twists, pliz.
Like Qnarry. I unreservedly nominate this for the best damn story in the issue. No kidding! The psychological impact of the story's brilliant clevelopment of a sensitive neurotic's nursing a persecution psychosis got mue between the eyebrows. On pain of death, get more Kent. Ajax the negalomaniac is odiferous but Space Episode offsets him.

Before I rest iny Poisoned Pen, one more bit of advice for you to forget. We readers of science fiction buy the stuff because we love the stagwering concepts of science, and the possibilities lurking behind the fog hiding the future. Our imagination is fed by your stories, but things like battles in the streets in Day of the Titans, and the peril of villainous Mars curl our palate. The only reason we stomach the Gay Nineties style of Brer Cummings is his vision we, too, have of the universes within the atoms and our universe as an infinitesimal atom in a horribly immense larger world. This is the stuff that dreams are made of and for all the knee-deep Teleites and Jovian emperors, we'll still swamp the magazine rack in the drug store. We love the stuff, Ed. Don't let us down.

TANCE SIMONDS

\section*{419 Berkley,}

\section*{Dearborn, Michigan}

For deep psychological stuff, Mr. Simonds, we suggest you let your imagination plumb the possibilities of a social complex such as Sphere Nine in The Core. However, Kent will be back. we are sure. We met him at lunch the other day and could tell by the fiendish expression on his face that he had an idea for something equally (we hope) as tantaliz-
(Continued On Page 107)
 ) FREE Catalog and information!

\section*{WHAT CAUSES EPILEPSY?}

A booklet containing the opinions of famous doctors on this interesting subject will be sent FREE, while they Jast, to any reader writing to the Educational Ibivision, Dept. D13-4, 535 Fifth Ave., New York, N. Y.

\section*{ASTHMA \\ Symptoms Relieved Write tuday for free information and special money back offer. W. K. STERLINE, 870 Ohio Ave., SIDNEY, OHIO \\ ANY BOOK IN PRINT!}

Delivered at ycur door. We pay postage. Standard authors, new ooks, popular editions, fiction, reference, medical, mechanical, children's books, etc. call at guaranteed avings. Send card now for Claikson's 1942 Cataleg.
FREEWrite fur olr yreat illustrated book cata. REE log. A short counse in literature. The buy. ing guide of 309.000 bcok lovers. The seler tion of a metrmpiitan brols store brought to your home. FREE if you kTite NON PUBIISHI
Dept. DA42, 1253 So. Wabash Ave., Chicago Itl.


Buy wholesale pand sels razor blades, tooth paste, shaving cream, personal needs, etc. Send For Pree complete catalogue. D-A
Keystone Rubber Co., Dept. D72 5th Ave., Niew lork City
 Mo Mother, Home, Love. Sacred, Patriotic, Comie or any subicct. Don't delay - Send us your original poem at once for our offer and FREE Rhyming Dietionary.
RICHAR
RICHARD BROTHERS, 147 Woods Building, Chicage, III.
SIDE-LINE SALESHEN AND AGENTS En. ior ilise Booklets, and other novelties. Each booklet size \(41 / 2 \mathrm{by} 23 / 4\) Ton different sample beoklets sent for 50 e or 25 assorted for \(\$ 1.00\) or 100 assorted for \(\$ 2.00\). Shipped prepaid. Whalesale novelty price list sent with order only. No orders sent C. \(\mathbf{O}\). D. Send Cash. Stamps or Money-Order. Repsac Sales Co., I W. 13th St., Dept. D-4, N.Y.O.

\section*{Watch for MAY CRACK Dełective!!!}

\author{
The Best in \\ Detective Fiction!!
}

10c on All Newsstands


\section*{UXCENSOREDI \\ Know the Truth abont New York's Night Life. Be an "Insider." Know all the ropes! \\ NEW YORK behind the scenes \\ 0350e by a f. 4 \\ Leo Martimer Edition}


Pulls no punches! Rips the mask off what goes on behind the "white lights" of Broadway. Gives amazing, uncensored peeks backstago-tells real story of night club lifetruth about chorus girls-dance-hall sirens-c abaret gold-diggers.

\section*{INSIDE INFORMATION}

Sensational erposes of petty rackets. An eye-opener thatwirving will astound you. Lays bare armprocreys spots-shows how to avoid spots-shows how to avoid
pltfalls of the Big Cityhow to get "most for your money."

\section*{Limited Edition-Order Now}

Get your copy now while they last! Just send 25 c in coin. Receive yours in plain wrapper by return mail. Canada, 35c.

\section*{HERALD PUBLISHING CO.}

22 E. 17th St., Dept. N-714 New York, N.Y.

\section*{CASH FOR UNUSED STAMPS}
U. S. unused postage wanted at \(90 \%\) face value for denominations \(1 / 2 c\) to \(19 e, 85 \%\) face value for denominations 20 c to 50 c . Small lots \(85 \%\) face value. MALL BTAMES REGISTERED. Money sent by return mail. GARBER SERVICE, 72 5th Ave., Dept. D-4, N. Y. C.


\footnotetext{
If you suffer from Asthma Paroxysms, from coughs, gasping, wheezing - write quick for daring FRES TRIAL OFFER of amazing relief. Inquiries from NACOR, 4822-X, State Life Bldg., Indianapolis, Ind.
}

\section*{FREE One 25c Size Sample. Enclose FREE 3 c stamp to cover mailing FOR STOMACH ULCER} Pain. Heartburn, Gas and Other Distress Due to Gastric Hyperacidity Learn all about inis remarkable, inexpensive home ureatment. Pain
often relieved promptig. No rigid or liquid diet. We will also send you, FREE with this samplo, an informative bookiot on this simple home treatment. Send for sample.
TWIN CITX VON CO., Dept. G-220, Minneapolis, Minn

\section*{CARDS}

\section*{DICE}

Inks, daubs, ink \(\&\) tailor-made readers, three-way dice, tops, shapes, books, jokes, novelties. Magical supplies. Catalog Free.
VINE, HILL \& CO. Dept. D. Swanton, Ohiه

\section*{MEN! WOMEN!} Strength and Vitality Can Be Yours!

\footnotetext{
Try VITA-RFi capsules. Truly natural elements of Vita-
} mins - Minerals. No chemicals. For New Cells - New Blood - New Mealth - Glands - Youthful Vigor. Two weeks suppls ( 40 capsules) sent postpaid for \$1.00. ORDER TODAY: No C.O.D. Satisfaction guaranteed or your money refunder. Desmiptive literature FREE. ALBA BIO-PRODUCTS CO. 65-C West Maple Street, Chicago, 11.

\section*{Free for Asthma}

If you suffer with attacks of Asthma so terrible you choke and gasp for breath, if restful sleep is impossible because of the struggle to breathe, if you feel the disease is slowly wearing your life away, don't fail to send at once to the Frontier Asthma Co. for a free trial of a remarkable method. No matter where you live or whether you have any faith in any remedy under the Sun, send for this free trial. If you have suffered a lifetime and tried everything you could learn of without relief; even if you are utterly discouraged, do dot abandon hope but send today for this free trial. It will cost you nothing. Address
Frontier Asthma Co. 155-J Frontier Bldg.
462 Niagara St.,
Buffalo, N. Y.


Let us help you find real happiness. Join Our old reliable club. 42 years of dependable, confidential service. Correspondents most everywhere. Many with means, seeking congenial mates. Proven results. Photos, descriptions free. STANDARD CLUB, Box C-40, Gray Lake, \(H_{0}\)

\section*{Station X}
(Continued From Page 105)
ing as Quarry. We won't say more until we see the story, but if it comes up to scratch, you'll see it before too long.
In the meantime, we'll do our best to see to it that F'uture contains enough of the type of tale that hits you between the eyebrows to make you dash madly newsstandrard every other month, plus four times a year for the Quarterly. (And we might add, if you haven't seen it, there's a very fine bit of subjective, psychological writing in a tale called Power Plant, by Lee Gregor in issue No. 5, which ts now on sale.)

But the problem isn't as easy as all that. We also have to put out a book which will make several tens of thousands of others also sprint for that first copy on the stands, a good many of whom like the Cummings classics, who like Ajax Calkins, and thought Day of the Titans was a first-class tale, without reservations. And some who didn't consider Quarry worth mentioning, or who thought Space Episode was pretty putrid. It is our none too simple but always enjoyable, task to arouse their enthusiasm as well as yours. Now, on to

CHESTER LAWRENCE FLOWERS
A few comments on the December issue starting with the Cummings reprint which was on the beam all the way, following with No Star Shall Fall which had a very pleasant, dreamlike plot, but was about ten pages too short. Day of the Titans also hit the sivot and the short stories were good, which sums up that this particular issue uas not half bad.

How about an autobiography, or biography, on Hannes Bok, particularly on where he studied his craft, etc. I think this would be an i.ıteresting feature.

Why not have a drawing symbolic of the Station \(X\) dept. at the head of the page? This would adcl quite a bit of interest to this dept. Now my last beef is that you left one story unillustrated. Even a bum picture is better than none.

Fou mention that Damon Knight, your new artist, moved to New York before he made any drawings for you. Does that mean you have to live in New York before you can illustrate for your swell mag. As I would (in some future time) like to illustrate science fiction stories. Yours for a miarvellous Febmuary issue, with plenty of Bok drawings 1443 North Park Avenue Chicago, Illinois

Some of your questions have already been answered. However, I'm publishing this letter because your question about the position of the illustrator in regard to pulp magazines edited in New York City is one frequently asked.

First of all, it isn't absolutely necessary for an artist to live in the city, but for all practical purposes it's not wise to use artists living outside of easy Manhattan reach. There's a reason for this: a good many times stories are scheduled very close to the deadline (the day copy has to go to the printer) and there is very little time for the illustration to be done. Now we can contact artists in the city and feel confident that they'll have the drawing in on time. While. on the other hand, an assignment mailed out, and due to reach us by mail, might be held up for any number of reasons. The illustrator might be ill, out of town, tied hand and foot with other workmight for any number of reisons be unable to do the picture in the given time. Or the picture might be either held up or lost in the mails.

Again, it happens at times that a drawing has to be changed or corrected. No one's perfect and sometimes an illustrator turns in a

\section*{Salaries \({ }^{\$} 1700-52600\) Per Year}

\section*{No Layoffs! Vacations With Pay! Regular Raises! Good Pensions!}

\section*{A LIFETIME JOB}

\author{
RAILWAY POSTAL CLERK8
}

Clty Mall Carrlers
Post Office Clerks
Rural Mail Carriers
Customs Inspectors
Patrol Inspectors
Accounting and

Clerks-File Clerks
Stenographers-Typists
Statistical Clerks (Ass't) Junlor Messengers

Immigration Inspectors
Auditing Assistants

\section*{Pay for Course Only After You Are Appointed \& Working}

So sure are we that our simplified Interstate Home Study Course of coaching will result in your passing the government examination and being appointed, that we are willing to accept your enrollment on the following basis. The price of our complete 10 -week lesson course is \(\$ 30\) plus \(\$ 3\) Examiners' Fee.

We are willing to give you any course with the understanding that you are to pay for it ONLY AFTER YOU ARE APPOINTED AND WORKING FOR THE GOVERNMENT.

\section*{GET READY IMMEDIATELY! FULL Particulars FREE!}

\footnotetext{
INTERSTATE HOME STUDY ACADEMY
901 Broad St., Div. H-4, Newark, N. J.
Please RI'SH me FREFE particulars. without any obligation. how to oualify for ngovernment. foh
(please print plainty in pentil)

Address

CIty
State

}

107

\section*{Your Hospital and Doctor Bills Paid}


\section*{SICKNESS or ACCIDENT}

Don't allow Hospitalization expense to ruin your life savings. Insure NOW . . . BEFORE IT'S TOO LATE! In case of unexpected sickness or accident you may go to any Hospital in the U. S. or Canada, under any Doctor's care. Your expenses will be paid in strict accordance with Policy provisions. Individual or entire family eligible (to age 70). No agent will call.

\section*{MAIL COUPON AT ONCE!}

\footnotetext{
North American Mutual Insurance Co.
Dept. D2-4, Wilmingłon, Def.
Please send me, without obligation, details about your "3c A Day Hospitalization Insurance Plan".
Name
Address
City
State
}

\section*{CASH IN}

\section*{ON YOUR SPARE TIME!}
 GUARANTEE!
you get ALL the tested mail crder plane, confiential dozens of Drefitable of practical tested formulus, successful tested schemes-actual exverience of men who have started on a shoestring-with less than \(\$ 10\) capital.

Buyers of This Book Tell Us-
leasi : "Biggest value l've yet to see. Book is worth at least a dollar. S. BUDA, Bkn, N. P ing it slour book is as sood if rot botter than others sell . . . "CASH IN" is the best value I have yet to see in the mall order field." LAWBENCE FOX, Breaklyn, N. I. "CASH TN" coutaing only tested deas corering every..type of full-or spare-sime enterpriso-it'g a "masterpiece" in business rentures.
25 CENTS per copy, Sent POSTPAID anywhere upon receipt of 25 cents U.S. stamps or coin.
M. L. SALES CO.

160 West Broadway, New York, N. Y. Dept. 4

\section*{THE TWO LEADING PICTURE MAGAZINES! \\ CLOSE-UP SLEEK! \\ GIRLS! CARTOONS! JOKES! ETC.! 10c EACH \\ ON ALL NEWSSTANDS!}

\begin{tabular}{|c|}
\hline  \\
\hline
\end{tabular}

Qive yoursolf the chance you deerrre set started it once on the road to learning Diesel, the indusCry of stupendous opportunityl Let Chief Engineer RoBbioom's iamous
DIE8EL HANDBOOK help youl Diesel dowrer is rapidiy supplanting gasoline and steam ongines in many Induatrles. Here are some of the job-opportunities for trained Diesel mon: Diesel-Electric Engineer. Stationary Diesel Operator. Marino Diesel Engineer, Diesel Manufacturer's Agent az Salesman. Diesel otc.. ote \(A\) lso Diesel Tus, Ferry. Dredge, Holst Plant. Iumber Mill, Logging Camd Oparilors, and many others.

\section*{6 BIG EDITIONS SOLD AT \$5}

Now
ONIY



719 PACES MUNDREDE OF ILLUSTRATIOMS The manazer, or , YK zamour wionol



 locomotive. aero, mutamotive mend
 ture if graphically inumerated with
hundreds oo line cuts and ball-tone hundreds of line cuts and balf-tone
engravings. Containe also. numer:
ous tables charts. diagrams, formu las, all arranked in finaple, readable or aulck reforence by professions
Diesel men.

MEN OF ALL AGES Remember. Diesel is an industry in Theli-not are Blesel opportuntion of of ererimere that power ifrtunition Diesel salemmen, orents and executtios play
as important a part as Dicsel engineers and operktors. BUT Beto xet into Dieael you must hnow Diegel for Diesel is much different from Diesel today \({ }^{\text {Wre. get atarted learning }}\)

DEFENSE PROGRAM OFFERS EXCELLENT OPPORTUNITIES IN DIESEL
M. L. Soles Company

160 West Broadway, New York, N. Y., Dept 4 Send me Chief Engineer Rosbloom's Diesel Handbook. t will pay postman \(\$ 2.98\) (plus postage) when the return it and you will refund my money.

Name
Address
City \& State
 coupon, thus saving the C. O. D. CHARGES and POSTAGE.


\title{
THE EASY WAY TO POPULARITY
}

\author{
Here Is a Complete Education for Just a Few Cents
}

Swing Steps
How to Be a Detective
How to Dance
Tip Top Tapping
Police Jiu Jitsu
Scientific Boxing

Get These Profusely Illustrated Books at the Speclal Price of:

\section*{35 с есн -3 гов 91.00 or 6 for \({ }^{\$ 1.75}\)}

\author{
M. L. SALES CO., Dept. 4 \\ Room 315, 160 W. Broadway, N. Y. C. \\ 1 enclose \$........ for which please send me the following books (check those you want). \\ \(\square\) Tip Top Tapping
\(\square\) How to be a Detective
\(\square\) How to Dance \\ Swing Steps Police Jiu JitsuScientific Boxing
}

Name \(\qquad\)
\(\qquad\)


Founded on the most simple and practical principle for self tultion with
Complote English pronunciation of overy word
LATEST REVISED EDITION 35 сеасн-3 for \(\$ 100-5\) for \(\$ 150\)
m. L. 8ALEs 00., 180 W. Broadway, N. Y. O, Dept. D-4
Enclosed find \$......... for which send me the follow. ing books:
Spanish
Polish
\(\square\) Italian
French
German

Name
Addross

\section*{MEET NEW FRIENDS}

Through our RERSONAL SERVICE, dedicated to the promnotion of friendships. Discriminating clientele-All religious faiths. Write or telephone Grace Bowes.

\section*{AMERICAN SERVICE}

236-DA West roth St., NEW YORK, N. Y. Telephone: EN dicott 2.4680

\section*{SONGWRITERS}

Original songs and song peems wanted. NO CHARGE FOR MELODIES. Marketing Service. Free Examination.

HOLLYWOOD RECORDING STUDIOS
Dept. DX3, Box. 87 Prauss sta.
108 ANGELES

Future Combined with Science Fiction

\section*{(Continued From Page 107)}
drawing which we feel needs just a bit of going over. If he is readily available we can return the original to him, or have him come down to the office and fix it up; with the illustrator available only by mail, that is impossible.

Often, again, we want to discuss a drawing with an artist beforehand. Thai is especially difficult to do by correspondence, particularly when, as is often the case with long stories, we cannot spare the mss, for artist to read. We often merely give him a description of the scene, tell all relevant details, perhaps sketch out roughly our idea of the layout. And, at times, the illustrator, then and there, can pop out with a better idea for a picture. (Yes, horrible confession that it is, it isn't always possible for the artist to read the story-though we do have them read it in most instances.)

A good many magazines edited in New York do have artwork by artists who live and work outside the city. But in most cases the illustrator is a very well known one, one with a high reputation, whose reputation is good enough to offset the disadvantages in using him at long distance. But insofar as your problem is concerned, that with breaking in to illustrating, the answer to the question is yes, the artists must live in New York City, or near enough to be obtained or called upon within an hour and at the nrevailing nickel fares.
Sorry about the lack of illustration for Quarry but it was what is known as a filler. In other words, a story shoved in to fit a vacant space at the zero hour. It often happens that a filler is more popular than a story the editor has scheduled, had illustrated, and perhaps given big write-up and cover-mention to. This is one of the reasons for scarcity of hair among editors.

Here's a sample of the kind of fault-finding we appreciate. Lend an ear to

\section*{EARL ANDREWS}

The receipt of the new February Future today made me remember that I'd intended to write you about the December issue. I'm assuming from your replies to readers' letters that you welcoine criticism, so will confine myself mainly to squawks.
First of all, that December cover. It isn't as good as it could have been, and I'm inclined to blame you, Mr. Editor, because it's up to you to lay down the law to artists. The main flaw is the color-coincidence of the sky and the buildings. What might have been a breathtakingly striking effect was almost completely lost because of the difficulty of seeing, at a glance, where those buildings end. The effect of the people being drawn up the vast shaft between the buildings is lost. The other flaw (not awfully important, I suppose, but it jumps out at me just the same) lies in the people's legs. Thcy're pretty ghastly-those legs, I mean. And the label for Around the Universe should have been put down a bit lower so that it didn't touch the croseture. Boh left plenty of space for it. At any rate, I hope, in the future, you will lay down the law to Hannes, and maxe him use bettercontrasting colors on objects next to each other.

On the interior pictures, Bok needs more bawling out. He sloould, as a matter of fact, learn a few lessons from Brother Dolgor, whr has already surpassed him in several respects. I'm referring now to the drawing for No Star Shall Fall which carne out much too darkly. Hannes should know enough about the paper you use by now to make allowances for reprocluction; Dolgov learned it in virtually no time at all. His drawings are fully as intri-
(Continued On Page 112)

\title{
Increased production means more jobs for MACHINISTS
}

\section*{—and MOREPAY formen whoknow their work}

This home-study course gives you the practical facts on modern machines, up-to-date methods, you need to advance in machine shop work. Take advantage of the other man's experience as found in books, to solve your problems, increase your efficiency, with


\section*{AMERICAN MACHINISTS' LIBRARY}

\section*{6 BIG, DURABLE VOLUMES-2368 PAGES, 2516 ILLUSTRATIONS, MANY CHARTS AND TABLES}

WTHIN the covers of these books are to be found all the facts that you will want to increase your practical knowledge of machine shop work and to give you the ability to handle all kinds of jobs swiftly, smoothly, correctly. Each of the six volumes contains a complete record of work as it is done today in America's most progressive and efficient shops. The books answer your questions on methods and machines-tell what you need to know about the operation of machines of all types and sizes for the whole range of metal cutting, forming, and finishing opera-tions-show by text, diagram, and illustration the essential points of setting up work.

\section*{PUTS THE MASTERY OF MACHINE SHOP WORK AT YOUR FINGER TIPS}

\section*{COMBINED HOME-STUDY COURSE AND REFERENCE LIBRARY BY PRACTICAL EXPERTS}

FRED COLVIN and FRANK STANLEY, well-known authors of many intensely practical books for machine shop men, have had years of experience, not only in on-the-job practice themselves, but also in keeping abreast of latest methods from one end of the metal working industry to the other, through their editorial con-
tacts with leading shops throughout the country.

In their books they give you the best of all the data, ideas, methods, and examples coming from these sources-the gist of more experience than any one man could amass in a lifetime of work.

These six big volumes are clearly written in simple language, fully illustrated, easily understood. With them you get the facts on modern machine shop practice, new machines, up-to-date methods-the complete, prac-

\section*{WHAT this Library GIVES YOU}
-"omplete guide for everybody, from shop executive to apprentices, interested in the operation of machines used in turning and boring practice
-essential principles and major problems inrolved in turning and boring operations
-description of all important rarieties of machines, both mantial and automatic, and methods of operating them -data on speeds and feeds, new cutlng alloys and materials, use of coolants, etc.
--praotical information on grinding machines and abrasive wheels, showing what they do, how to operate them, and thow to make best use of them on various types of work
—preferred methods of leading shops, on speeds, feeds, precision grinding, automatic machines, special work, etc.
-training in the various operations performed in drilling and surfacing materials in the machine shop
-valuable data, methods, suggestions and illustrations from accepted practice, showing painls how to handle the cutting of materials, the care of tools, methods of production, etc.
-exact. descriptive data on all aspocts of gear cutting practice, useful in shops of any size
-ossentials of selecting machines, setting up work, and handling operations in reaming, tapping, Dlaning, shaping, slotting, milling, and broaching
tical training course-mthat you can use to improve your skill and advance your earning power now

\section*{NO MONEY DOWN-SPECIAL PRICE—EASY TERMS}

Let us send you these fact-packed books for 10 days' free examination, with no obligation to buy the books unless you want them. Remember that, if you decide to keep the books want them. Remember that, if you decide to keep the books price of the books if you were to buy them separately. Furprice of the youks if you were to buy them separately. Furthermore, you may have the privilege of paying in small coupon today.

FREE EXAMINATION COUPON
MeGRAW-HILL BOOK CO., Inc., 330 W. 42nd St. N. Y. C.
Send me the American Machinists Library, volumes. for 10 days examination on approval. In 10 days I will send \(\$ 1.50\), and \(\$ 3.00\) monthly uastil the price of \(\$ 19.59\) is paid, or return the books postpaid. (To insure prompt shipment write
plainly and fill in all lines.)


Name
Address
City and State
Position
Company

\section*{(Continued From Page 110)}
cate as Bok's, often more so, yet each one is clear-even those which are supposed to be indistinct and shadowy. Dolgov has a marvelous command of textures, a matter where Bok often falls down.

This isn't to minimize the splendid work Bok has done in the past and what 1 expect he'll do in the future-for Future. But his work is-shall we say temperamental? It hits highs and lows, while Dolgov has retainpd an increasingly high medium. I don't mean mediocrity by that; perhaps \(I\) should have saicl level.

Your new artist. Knight, shows possibilities. but that is ubout all. His stuff isn't unpleasant, but is far too cartoony for my taste. He needs a better command of textures, of contrasts, and of various shading-techniques before he can rate as a genuine illustrator. My vote is to drop him unless he shows steady improvement.

Forte, on the other hand, seems constantly to be improving, which is why I personally can tolerate the faults he still has. These faults, I might add, lie mainly in his humans, who have a wooden-ness to them and, as with Knight, a cartoony aspect. The drawing for the Kummer novelette is the best that Forte has done for you so far, and I'm looking forward to more improvement. Oddly enough. his foibles in black-and-white work seem to be vastly minimized in the cover he did. The man on that cover is a cartoon-strip man, but the girl is excellent.

Now, to stories. As with most of your readers, I had not read Around the Universe before. There are elements in this story of timelessuess, the type which Morley spouts about, but they are negated by other elements which date it badly. The pedantry is Victorian, the character of Tubby overdone, and the melange of facts a bit jerky. It does, I'i admit, have a certain charm about it you do not find very often even in the best of modern stuff. but I wish you'd picked. a different tale. Tarrano, and Man on the Meteor were much better reading.

Day of the 'ritans is a good example of the kind of story you should avoid. It is an excellent story of the type we do not want. Paradox? Perhaps. But it is so clearly a formula tale, that even the better-than-aver-age-Kummer things in it could not save it. I'd say offhand, if you are conscious all through the story that it's formula, then bounce it. On the other hand, a tale might have the oldest plot in the world, but if we readers are so taken up by the way it's done that we clon't think until sometime after that it's the same old stuff, then it's what we want.

A good example is Aja.x Calkins. From the dawn of literature there have been stories of this type; the buffoon hero who thinks he is the greatest thing in creation, and his misadventures and boasts. 'There's nothing new about it. But it has a terrific appeal when done right, and for my money, Calkins is done right. However, Mr. Editor, you fell down again on the job by having the first two Calkins tales so short, particularly, Destiny World.
for the others: Salvage Joll was too obviously a now-stf tale dressed up to fit. It was good reading, but dicln't fit. Should have been written as a straight diving story and laid in the south seas. Momething' From Beyond had too much basis in the strictly weird for Future. It just wasn't handled right for stf; in a magazine of weird fiction, it would have been okay. but not in Future.

Space Enisode, now, was a lovely example
of something or other. That story was as full of holes as the well-known sieve. 1 could, had I the time, crite three solid pages discussing them. But that isn't the point. So skillfully was it written and paced that 1 was not aware of the holes in it until after I finished it and laid it aside. The suspfnse was excellent; the writing first-rate, and the human element credible, for the reading time. Only next time you get a story of that type. please see thrat it stands up under scrutiny.

Station \(X\) is a fine department, but the setup is not pleasing. There should be more breaks in it and a better line of differentiation between the readers' and \(\epsilon\) ditor's comments. Futurian Times seems ohay as stands.

That's about all this tince. Hope by the time this is in print, if indeed you print it, some of the defects will have been remediedand that some of this criticism uill have been helpful.

Brooklyn, New York.
Some of the defects you mention have been corrected. And ye ed. does appreciate your criticism. Write again!

As for increasing the number of pages-well, we still need more support. Are you-not only you, Earl, but all of you who read thisdoing your part? Did you find a new reader between the time the February book appeared on the stands and this current issue came out? Can you do it again during this twomonth period? If the circulation figures show that you all can help get new fans for \(F u\) twe, then we can start going places, black invaders be damned.

I-and I hope all of us-sincerely hope and believe that we can retain all our cultural standards during the present conflict. And I believe that good, imaginative fiction is a part of the new American tradition in literature. Not that Future prints all first-class literature-but that in its orwn way it is a dynamic force for the prosress that is to be ours.

\section*{FOR COLLECTORS}

Fantasy Jiction Field Illustrated News Weekly. This is also issued by Julius Enger and contains price lists on old issues of ste, fantasy and weird magazines, as well as books. If your collection is incomplete, here's a chance for you to fill it at reasonable prices. However, FFF News Weekly is more than just advertising. It's fankind's semi-ヶfficial newssheet, containing all the latest dope on who's who and what's what in the professional and fan field. Moreover, each issue contains at least one foto-either of a forthcoming stf or fantasy magazine cover, or of fans, fan activities, and so on. 5c the copy; 6 for a quarter.

\section*{THE FAN PRESS}

Imagi-Music, published by Fenry Andrew Ackermann, 5200 Maple Avenue. "Pimlico," Baltimore, Maryland. Price 3 for 20 c ; no single copies sold.

The first issue contains highly interesting dissertation upon the strong connection between types of music and fantasy as well as comment upon specific classic pieces. It's a field which fantasy enthusiasts haven't dipped into much, and should offer considerable ground for research and discovery. Not too technical. either; we personally cannot read a note of music, but we found it all entirely comprehensible and entertaining. Recommended.

Thanks to all of you who wrote in. Sorry we couldn't print them all, but. after all, we are primarily a magazine of fiction. Untll next issue, then, thumbs up, and happy reading with Future. RWL.


At last the whole truth about sex! The time has come to bring this intimate and necessary knowledge into the light of dayan who wants to lead a satisfactory, healthy, full love life. Written in simple and frank language-SECRETS OF LOVEle and frank language-SECRETS OF LOVE AND MAR-sex-how to win love-how to conduct yourself during your honeymoon. The booli teachself during your honeymoon. The boolx teachthe technique of performing the sex act. The the technique of performing the sex act. The book explains: the problems of the wife and how to solve them-and the problems of the husbands and how to overcome them. Sometimes they are actual phisical disabilities, such as impotence, sterility, etc. The book advises you on correcting these difficulties. It also, devotes a chapter to "BIRTH CONthe method of accomplishing. It features a the method of accomplishing. It features a table of safe periods." It explains conception, pregnancy. In short. it is a complete of Love and Marriage. P Love and Marriage.
"Secrets of Love and Marriage" is an endless source of intimate, intriguing information, from the first awakening of youthful love to the full flowering of grand passion.. answering many questions you hesitate to ask even your closest friends. You must know the real facts and ways or be cheated out of life's most precious pleasures!

\section*{Let Us Send You This Book on Trial!}

Send no money now. Just mail the coupon. When book arrives, deposit with postman only 98c plus shipping charges, under our ing. Mail coupon now.
 26 East 17th St., New Yorls, N. I.
Send me "SECREIS OF LOVE AND MARRIAGE." In plain wrapper. I will pay pustman 98c plus shipping costs on delivery. I can return the book, if not over 21 years old) money
over 21 years old.)
Name
Address
City
State
Check here if you are enclosing \(\$ 1.00\) with the coupor and thereby saving \(C\). O. D. charges. Your
boot sent postpaid under same MONEX BACK boot sent postp
GUARANTEE. Impossible to send \(C\).
send \(\$ 1.20\) with order.

\section*{"SERETIS of LOVE and MARRIAGE" Daringly Revealed}

\author{
Edited by Dr. Edward Podolsky
}

This is an enlightened age. Are you one of those, still afraid to know the truth about the many intimate questions of man or woman? Or are you one of those who thinks-"I know it all"- and is actually unaware of many important facts and pleasures? Do you know how to live a complete, vigorous and delightful sex life? Do you know your part in the game of love? Every happy marriage is based, to a great extent, on a happy sex life. But how can you lead a satisfactory love life, if you do not know-or are not sure, of the many, many facts and ways of love, of marriage, of sex-of the 1000 ways of a man with a woman! Are you getting ALL that you expected, that you dreamed of-from your love, from your marriage, from your sex life? Or are doubts and difficulties in the art of love troubling you, holding you back, spoiling everything?
Offers a Liberal Education in Sexual Science

\section*{PART OF CONTENTS}

Introduction by
Edward Podolsky, M. D. Foreword by James Parker Hendry Need for sex understanding to aid key to true understanding of ser. Chapter I - Married Men Should
Instinct is not enough - the wedding night--perpetuating the honeymoon -functions of organs and body in marriage relations -skillful wooer can overcome timidities.
Chapter 2-Love Problems of Wives
Why marriages rail-wifo often rustrated, disappointed-husband should improve in serual relations -set routine grows boresome case of the under-sezed
Chapter 3-Scientific Sex Program in Marriago
Marriage based on mutual love and co-operation-instructions for performing and following marriage ex program-chart of safe periods -normal frequeney of relations.
Chapter 4-Functions of Organs The purpose of sex-how coneption takes place - secondary stimuli zones - attaining highect pitch in compatibility.
Chapter 5-The Art of Married Love
The importance of preparationfirst act the courtship or love-making-second part of the Coi-tus-many positions possible-final act or climax-half hour all too short for courtship--derelop mutual sexual rhythm-reaching a climar together-women often unsatisfied - problems of physical mismatching-orercoming difficulties.
Chapter 6-Secrets of Sex Appeal What does a man notice how to dress for charm and appealchoosing clothing, attending to complexion, figure and personality. Chapter 7-Dangers of Petting Is it wise to pet to be popu-lar?-Embracing bodies and kissing lips dangerous?-rearning desires difficult to control.
Chapter \&-How to produce ideal
conditions for marital relations in your home.

Chapter 9-Birth Control
A moral issue long debated-. arguments in favor and against contrivances against law-various methods used - no method ideal.
Chapter 10-Mistaken ideas on sex.
Chapter It-Adrice to marriel people.
Chapter 12-Pregnaney
Changes rollowing ertilizationfirst indications of pregnancy care of Drospective mother-abortions and miscarriages--dangers of pregnancy-preparations for birth -presnancy 280 days adproxinately.
Chapter 13 -Techniques Parorablo for mutual satisfaction.
Chapter 14-Can Sex of Unborn Child Be Chosen
Science investigating various theories-no certain methods.
Chapter 15-Motherhood
Actual process of childbirth-ollow doctor's instructions ferer - summary for prospective mothers. Chapter 16 - Methods of Easy Childhirth
Select doctor you have complete confidence in-follow his instruc-tions-anesthetics which diminish labor pains without injuring infant.
Chapter 17-Intimato Questions of Hushands
-vercoming some common sexual problems-how to attain "control" -importance of prolonged court-ship-effect of frequency of con-trol-orercoming frigidity in wives -can impotency be overcome-organic deficiencies-various faults and theit remedies.
Chapter 18 -Intimate Questions of Wives
Importance of free discussion with husband-avoid haste-be Da-tient-strive for perfection-sex a mutual matter-abstinence and ex \begin{tabular}{c} 
cesses-intimate women Droblems. \\
Chapter \\
\hline 9 Hygieno
\end{tabular} and Beauty
How to develop your charm and er appeal.
-Discussion of serual types.

\footnotetext{
HERALD PUBLISHING COMPANY
26 East 17th St., Dept. A-714, New York
}


Every one a well bound book. Average size \(51 / 2\) X \(73 / 4\) inches. Each book from 168 to 282 full pages.
The above selection makes an excellent addition to anyone's library. We cannot duplicate this offer. When our present supply is exhausted, the price of these books will be double.

\section*{ORDER NOW—WE PAY، ALL POSTAGE}
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{3}{*}{\begin{tabular}{l}
Name . . . . . . . . . . . . . . . . . . . . \\
160 W. Broadway (Book Dept.) New York City \\
I enclose herewith my remittance of \(\$ \ldots .\). for which please sen me the books which I have checked. It is understood that they are 25 c each, but if I order all 6 you will send them to me for \(\$ 1.00\) including postage.
Babies Without Tails Murder Strikes Three \\
City \& State . . . . . . . . . . . . . . . . .
Death Slams the Door A Passage to India
Graveyard Watch The Blood of the Conquerors
\end{tabular}}} \\
\hline & \\
\hline & \\
\hline
\end{tabular}

a Shop COMPANION that answers your questions Easy to read and understand-flexible covers-Handy size \(5 \times 61 / 2 \times 2\)-a ready reference that answers your questions accurately.

\section*{TO GET THIS ASSISTANCE FOR YOURSELF SIMPLY FILL IN AND MAIL COUPON TODAY \\ THEO. AUDEL \& CO., 49 W. 23rd St., New York}

1 PRACTICAL INSIDE INFORMATION
ForEvery Machinist, Toolmaker, Engineer, Machine Operator, Mechanical Draughtsman, Metal Worker, Mechanic or Student. This 1600 Page Handy Book Covers Modern Machine Shop Practice in All Its Branches.

\section*{A COMPLETE INSTRUCTOR WITH READY REFERENCE INDEX}

New from Cover to Cover. Tells How to Operate and Set Up Lathes, Screw \& Milling Machines, Shapers, Drill Presses \& All Other Machine Tools.

\section*{5 PRACTICAL BOOKS IN ONE! 60 FULLY ILLUSTRATED CHAPTERS}

Covering: 1-Modern Machine Shop Practice. 2-Blue Print Reading and How to Draw. 3-Calculations \& Mathematics for Machinists. 4-Shop Physics. 5-How to Use the Slide Rule.

\section*{ASK TO SEE IT!_-}

THEO.AUDEL \& CO., 49 West 23rd St., New York Mail AUDELS MACHINISTS \& TOOLMAK. ERS HANDY BOOK, Price \(\$ 4\) on 7 Days Free Trial. If O.K. I will remit \(\$ 1\) in 7 days and \(\$ 1\) Monthly untilS4 is Paid.Otherwise I will return it.
```

Name

```
Adđress.

Occupation.
Reference.


\section*{THIS
BEAUTFUL DESK
framy \(\$ 1.00_{\text {EXTRA }}\)}

\section*{WITH ANY REMINGTON}

\section*{PORTABLE TYPEWRITER}

A beautiful desk of handsome Walnut grain, finished with rich Burgundy top which will fit into the decorations of any bome, and made of sturdy fiber board, is now available for only one dollar ( \(\$ 1.00\) ) extra to purchasers of a Remington Portable Typentiter. The desk is so light a child can move it, so strong it will hold six hundred ( 600 ) pounds! What a combination this desk and a Remington Portable Typenriter make-a miniature office in your bome! Leara complete details of this offer. Mail the coupon today!

\title{
Remington's Amazing Combination Offer
}

How easy it is to get this combination of a desk and Remington Deluxe Noiseless Portable Typewriter. Just imagine, a small deposit and the balance on Remington's easy 10 pay plan. This will actually make you immediately the possessor of this amazing office-at-home combination. You assume no obligations by sending the coupon.

\section*{THESE TWO EXTRAS FOR YOU}

To help you even further, you get free with this special offer a 44-page booklet, prepared by experts, to teach you quickly bow to typewrite by the touch method. When you buy a Noiseless you get this free Remington Rand gift that increases the pleasure of using your Remington Deluxe Noiseless Portable. Remember, the touch typing book is sent free while this offer holds.

\section*{special carrying case}

The Remington Deluxe Noiseless Portable is light in weight, easily carried aboui. With this offer Remington supplies a sturdy. beautiful carrying case which rivals in beauty and utility the most attractive luggage you can buy.

\section*{SPECIFICATIONS}

ALL ESSENTIAL FEATURES of large standard office machines \({ }^{\text {appear }}\) in the Noiseless Portable-standard 4-row keyboard; back spacer; margin stops and margin release; double shift key and shift lock; two color ribbon and automatic ribbon reverse; tabulator; variable line spacer; paper fingers; makes as many as seven carbons; takes paper \(9.5^{\prime \prime}\) wide; writes lines \(8.2^{\prime \prime}\) wide. There are also extra features like the card writing attachment, black key cards and white letters, touch regulator, rubber cusbioned feet. These make typing on a Remington Deluxe Noiseless Portable a distinct pleasure. Thousands of families now using the Remington Deluxe Noiseless Portable know from experience bow wonderful it is!
```


[^0]:    FUTURE COMBINED WITH SCIENCE FICTION, published every other month by COIUMBIA PUBLICATIONS, INC., 1 Appleton Street, Holyoke, Mass. Editorial and executive offices, 60 Hudson St., New York, N. X. Entered as second class matter at the Post Office at Holyoke, Mass. Yearly subscription 75 c . Printed in the U, S. A,

[^1]:    CAII COUPON NOW: Lदल

    231 W. Monree St., Chieage, III.
    Send Underwood Noiseless (F.O.B. Chicago) for ten days' trial. If I
    keep it. I will pay $\$ 3,00$ per month until easy term price ( $\$ 43.85$ ) is paid. If not satisfied I can return it express collect. $\square$ Check
    $\qquad$
    $\qquad$
    $\qquad$
    $\qquad$

    $$
    \begin{aligned}
    & \text { City } \\
    & \text { CAUTION-For quick shipment give eceupation and roference. . on Underwoodr }
    \end{aligned}
    $$

[^2]:    HEALTHCRAFT, INC. Dept. 758-B,
    247 West 19th St., New York, N.
    Send me "Sex Satisfaction and Happy Marriage." by the Rev. A. H. Tyrer, in plain wrapper marked "Personal." I will pay \$1.98 and a few cents delivery charge

    I MUST BE DELIGHTED or $I$ will return book within 5 days and you will refund purchase price. (I am over 21 years old.)
    Name
    Address
    $\square$ CHECK HERE if you wish to onclose only $\$ 1.98$ with coupon, thus saving delivery charges,
    (Same Monety-back Guarantee, of Course)

