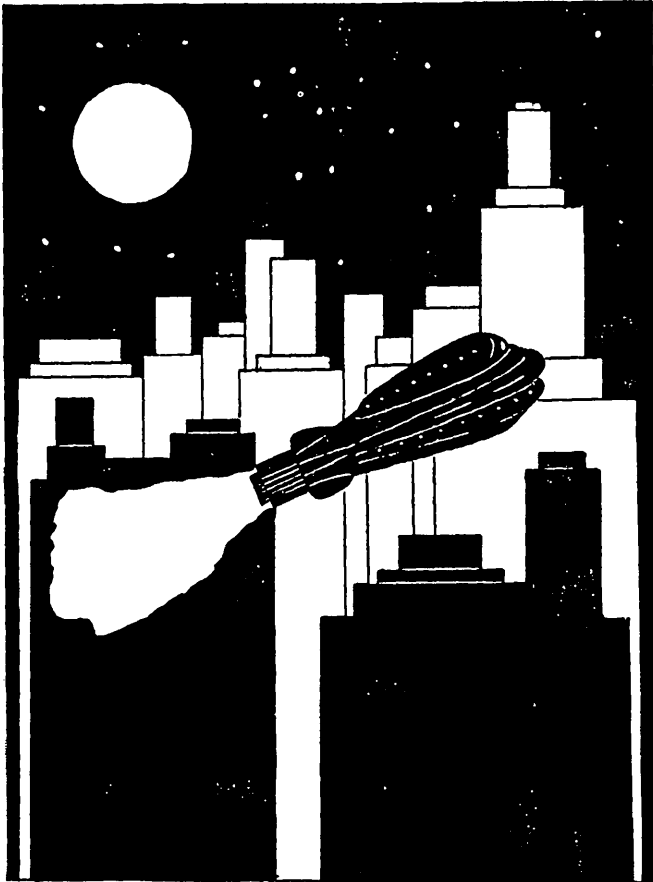


*Journal of the
British Interplanetary Society*



JOURNAL OF THE British Interplanetary Society

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WATCH OUT FOR

“World Rocketry To-day”

By P. E. Cleator

in **ARMCHAIR SCIENCE**

“The Conquest of Space”

by P. E. Cleator

in **THE HALTON MAGAZINE AND THE DAEDALUS**

“Die Raketenbewegung in England”

By P. E. Cleator

in **DAS NEUE FAHRZEUG**

The monthly accounts of the meetings of the Society
which appear regularly in

PRACTICAL MECHANICS

SCIENCE AND INTERPLANETARY COMMUNICATION

By Professor A. M. LOW.

I ALWAYS believe, if it is possible, that it is best to tackle any difficulty on the spot. In this connection, I think one must admit that communication with, or travel to, other planets is regarded by some people as a foolish dream.

Perhaps it is not generally realised that most scientific discoveries began in a somewhat theatrical manner, and that many years of persecution often rewarded the inventor or observer of a new principle. Centuries ago the Duke of Buckingham spent large sums of money in an endeavour to discover the elixir of life, a project for which generation after generation have laughed him to scorn. To-day we read that Dr. Voronoff and many others have succeeded in Buckingham's quest, which was not to give people perpetual life, but to extend their span of existence by about six or ten years.

Much the same circumstances applied to medieval attempts to discover the Philosopher's Stone, a talisman which would turn lead into gold, or enable the transmutation of matter to be achieved. When we hear that atomic bombardment may, or even has, succeeded in breaking up what we thought was the initial structure of matter, we probably carry on with the cross-word puzzle and take this miracle as a matter of course.

I am very much afraid that most people will be left behind in the search for the inhabitants of other planets, and that, by prejudice, the moment of the discovery, wonderful though it may be, will be postponed.

I always remember that about three hundred years ago old women were burned as witches on the evidence of children.

Yet another example of "one-track" thinking is evidenced by those who say "The oxygen supply on Mars is somewhat lacking, and human beings could not live in such an atmosphere." To me, this is particularly stupid, for I cannot conceive that our own particular form of life with eyes, noses, and mouths, can be the only one in the universe. Venusians might see by smell or hear by heat for all we know; they might exist in a form which to us is thought alone, for all my brain can conceive. It is my humble view that the words "in my opinion" should preface almost every remark, for if thought can give rise to electronic waves, who knows what effect may eventually be produced upon matter by the apparently casual action of our brains?

Nothing that humanity can conceive is impossible. It seems to me rather more foolish not to attempt some form of interplanetary communication than it is to state that communication is impracticable. There are many possible avenues of approach and it is most clear that by concerted effort something, even if only mundane affairs, could be learned by making the honourable attempt.

Let me express the sincere hope that such experiments do not one day lead to the formation of objectionable Companies, or to the possibilities of extending our capacity for enthusiastic warfare.

EDITORIAL

By P. E. CLEATOR.

Progress during the last Quarter.

TRULY an editor's job is no sinecure. After fully preparing for a sixteen page issue of the Journal, I have discovered, inevitably at the last moment, that the dictates of economy will permit but half that number. I have just completed the thankless task of ruthless elimination. And my sincere apologies are due to Dr.-Ing. Dipl.-Ing. Otto Steinitz, Mr. J. G. Strong, and Herr Ing. Guido Pirquet for the omission of their invaluable contributions in this issue. My apologies are also due to Dr. Jakow I. Perlmann, whose article has suffered mutilation at my hands in order that I might include the salient points in these notes.

The decision to reduce the size of the Journal to eight pages was only reached after the most careful deliberation. There can be no doubt but that the previous issue, containing sixteen pages, created a very favourable impression, not only in England, but throughout the world. Unfortunately, favourable impressions alone do not take care of publishers' bills. And while membership has continued to show a steady increase, our total personnel does not, in the opinion of the Council, yet warrant a sixteen page Journal as a permanent feature. But it will not be long, I hope, before we can safely revert to the larger issue.

Our Distinguished New Fellows.

While the number of new members may not have come up to expectations, any disappointment over quantity has been amply compensated for by quality. Certainly the Society has been very fortunate in having enrolled such distinguished scientists as Professor A. M. Low, Mr. G. Edward Pendray, Mr. H. Grindell Matthews, and Ing. Friedrich Schmiedl.

I had the great pleasure of meeting Professor Low in London a few weeks ago, a meeting which promises well for the Society. Already this distinguished physicist has been of material help in many ways. And busy though he invariably is, he immediately answered my request for an article for the Journal with the contribution contained elsewhere in these pages.

Mr. G. Edward Pendray I have not yet met, though I am hoping to do so in the not too distant future. He has very kindly invited me to stay with him at his home in Crestwood, New York. But exactly when I shall be able to make the trip is, unfortunately, problematical just at present. Mr. Pendray's many activities in connection with the American Society are well known. When I mention that, coupled with this, he is the science editor of that important news magazine, *The Literary Digest*, and also an author of no mean repute, the extent of his usefulness will be readily appreciated.

I have also yet to have the pleasure of meeting Mr. H. Grindell Matthews, who, readers will remember, came into prominence several years ago in connection with a lethal ray which he invented.

Now, Mr. Matthews has turned his inventive genius to rockets, and is at the present moment engaged in the construction of a large experimental model. I hope to be able to give a full report of his experiments in a later issue.

Ing. Friedrich Schmiedl, as is well known, was instrumental in inaugurating the first officially recognised rocket postal service in the world. No mean achievement, this. For not only had this brilliant young Austrian inventor to perfect his letter-carrying device, but he had to convince the Austrian Government that the idea was feasible. And from personal experience of official apathy, I should say that the latter problem was by far the more difficult of the two.

Progress in other Countries.

Our distinguished French Fellow, Monsieur Robert Esnault-Pelterie, has now returned from his visit to the American experimenters in New York. His return was made the occasion of a lecture on astronautics which he delivered to the *Société des Ingénieurs Civils de France*, at Paris, on May 25th.

Monsieur Pelterie very kindly sent me an invitation to the lecture, but a previous and important engagement made it impossible for me to attend, much as I should have liked to have done so. However, I am looking forward to receiving a published report of his lecture in due course.

Dr. Jakow I. Perlmann, of the Leningrad branch of the G.I.R.D. (Groups for the Study of Reactive Movement) reports—in his article to which I have already referred—on present activities in the U.S.S.R. Recently, Ing. Shtern, of the Leningrad group, has invented a new type of rocket motor, working on a rotary reactive principle. A special rocket is now in the course of construction for the purpose of testing the device. When completed, the rocket will stand about ten feet in height, and will weigh nearly 150 pounds. Provision has been made for the carrying of meteorological instruments, and it has been calculated that the vessel should be capable of attaining a height of thirty miles or more. The Leningrad group is also planning to shoot a test rocket which will reach the limits of the earth's atmosphere.

The Moscow group is experimenting with rocket-propelled planes for stratosphere travel.

Up to the time of writing, I have not received any report of the American experiments mentioned in the last issue, though I expect some information daily. In the meantime, I have heard, though only unofficially, that the name of the Society has now been changed to "The American Rocket Society."

Herr Zucker's Postal Rocket.

When, in the company of Professor A. M. Low, and several other members of the Society, I visited Herr Gerhard Zucker at the Apex Exhibition, London, arrangements had not been made actually to shoot one of his postal rockets. But, as is well known, the experiment has subsequently taken place, and quite successfully. What will be the outcome remains to be seen. In the course of my conversation with him, Herr Zucker stated that he hoped to construct a large rocket here in England, with a view to establishing a regular rocket postal service between England and the continent. After which, he envisions the formation of a company for the manufacture of postal rockets for world distribution.

LIST OF BOOKS ON ROCKETRY

Compiled by WILLY LEY.

American.

Dr. R. H. Goddard: *A Method of Reaching Extreme Altitudes.*
David Lasser: *The Conquest of Space.*

French.

Robert Esnault-Pelterie: *L'exploration par Fusées de la Très Haute Atmosphère et la Possibilité des Voyages Interplanétaires.*
Robert Esnault-Pelterie: *L'Astronautique.*
René Lorin: *L'Air at la Vitesse.*
Rodolphe Soreau: *L'Hélice Aérienne Propulsive.*

Italian.

Luigi Gussalli: *Si può già Tentare un Viaggio d'alla Terra alla Luna.*

German.

Professor Hermann Oberth: *Die Rakete zu den Planetenräumen.*¹
Dr. Walter Hohmann: *Die Erreich der Himmelskörper.*
Willy Ley: *Die Möglichkeit der Weltraumfahrt.*²
Willy Ley: *Die Fahrt ins Weltall.*
Willy Ley: *Grundriss einer Geschichte der Rakete.*
Dr. Vl. Mandl: *Das Weltraumrecht.*
Dr. Vl. Mandl: *Die Rakete zur Höhenforschung.*
Max Valier: *Der Vorstob in den Weltraum.*³
Dr. Ing. Eugen Sänger: *Raketenflugtechnik.*
Hermann Noordung: *Das Problem der Befahrung des Weltraumes.*
A. B. Shershevsky: *Die Rakete für Fahrt und Flug.*⁴
Werner Brügel: *Männer der Rakete.*

Russian.

Professor N. A. Rynin: *Interplanetary Traffic.*⁵
Dr. Jakow I. Perlmann: *Interplanetary Voyages.*
K. E. Ziolkowsky: *A Rocket into Cosmic Space.*
K. E. Ziolkowsky: *Exploration of Cosmic Space by means of Reaction-hips.*
Yury Kondratyuk: *The Conquest of Interplanetary Space.*
F. A. Zander: *The Problem of Flight by Reaction.*

-
- 1.—A third edition, published in 1929, appeared under the title: *Wege zur Weltraumfahrt.*
 - 2.—Written in collaboration with Professor Oberth, Dr. F. von Hoefft, Ing. Guido Pirquet, Ing. Fr. W. Sander, Dr. Karl Debus, and Dr. W. Hohmann.
 - 3.—After the fourth edition, the title was changed to: *Raketenfahrt.*
 - 4.—The author is a Russian, but the book was written and published in Berlin.
 - 5.—A most comprehensive work, consisting of nine volumes of approximately 200 pages each. Profusely illustrated.

NEW MEMBERS.

The following new members were elected during the months of April, May, and June of this year :—

Fellows.

Professor A. M. Low, D.Sc.	...	London.
G. EDWARD PENDRAY	New York.
H. GRINDELL MATTHEWS	London.
Ing. FRIEDRICH SCHMIEDL	Graz.

Members.

J. R. HEATON	Colne.
J. G. STRONG, B.Sc.	London.
F. J. FIELD	Sutton Coldfield.
J. WOOD	Manchester.
G. R. R. TAYLOR	London.

Associate Members.

P. HETHERINGTON	Southwait.
S. TUCKER	Far Rockaway.
B. J. PRUGH	Westfield, N.J.
L. PARSONS	Milliken Park.
F. J. DARWIN	Southport.

The annual subscriptions for the three classes of membership are : Fellowship, £2 2s. 0d. ; Membership, 10/6d. ; Associate membership, 5/-.

All classes of membership are open to both sexes, and all members receive free copies of the *Journal of the Society*.

Ordinary meetings of the Society are held fortnightly in winter, and monthly in summer, at which time addresses on all phases of the activities of the Society are presented by members and invited speakers.

For full particulars and Membership Application Forms, address all enquiries to :—

THE SECRETARY,
THE BRITISH INTERPLANETARY SOCIETY,
34, OARSIDE DRIVE,
WALLASEY, CHESHIRE, ENGLAND,
or to
L. J. JOHNSON, Esq., *Secretary*,
THE BRITISH INTERPLANETARY SOCIETY,
46, MILL LANE,
LIVERPOOL, 13, ENGLAND.

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Those interested in the fascinating and at present baffling problems which surround the conquest of space should not fail to read :—

“ The Possibilities of Interplanetary Travel, ”

BY P. E. CLEATOR, A.M.I.R.E., A.M.I.E.T., F.R.S.A.,

President of the British Interplanetary Society,

which appeared in *Chambers's Journal*, for January, 1933. The stock is limited. Obtain your copy now, 1s. 2d. post free from the Publishers :—

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