EDITORIAL

Upon the occasion of the vernal equinox of the present year, the Junior Astronomical Society came into existence. This was due in the main to a group of enthusiasts who decided that a Society which existed for the benefit of the absolute beginner and the numerous "star-friends" who, though not having had a scientific training, enjoyed the pleasurable pursuit of astronomy, was quite an important essential.

Since the date of its inception the Society has, like the healthy child it is, enjoyed a steady but vigorous growth, so that its success is perfectly assured. As the President details the aims and methods of our organization in his personal letter in this issue, this note concerns itself with the Journal alone.

It is hoped that one number every two months will be issued to members whose subscriptions have been paid. The contents of each number will normally follow a set plan, as follows: A leading article of general interest, usually by a leading astronomer, to be followed by other contributed papers, also notes and correspondence from members on astronomical and astronomical topics, book lists and reviews, and finally Society notices.

For the greater part the success of the Journal depends entirely upon our members, so it is hoped that some at least will submit notes, articles, drawings, etc. Material intended for consideration should be sent direct to the Editorial address:

1, Dee Banks, Boughton, Chester. The Editor

OUR SOCIETY

A Letter from the President

It gives me much pleasure indeed to welcome you to the Junior Astronomical Society, and I speak for all Founder Members when I express the hope that your stay with the Society will be a long and very happy one. I am greatly honoured to have been chosen your first Pre-
sident, a position in which I shall endeavour to serve the Society to the utmost of my ability. When my term of office has expired I shall continue to serve as Secretary and Treasurer.

As you know, the Society has been formed for the purpose of helping those interested in astronomy to learn, understand, and enjoy the subject under sympathetic guidance and instruction. The word "Junior", however, does not relate to age, for the Society is open to all people, irrespective of age, who are "juniors" in astronomy. Members' experience varies widely; some are complete beginners, others have a moderate interest and wish to read about the subject without going too far into it, whilst some require coaching to enable them to branch out into more specialized fields later on. I suppose we could really call it an "Everybody's Society" - it is here to answer all those puzzling little queries that its members may raise, and to give popular "easy to understand" articles in its publications.

We wish the Society to be guided and helped on its way as much as possible by the members themselves. We would like to know what sort of help you require, and I would emphasize just how much we need your ideas, suggestions, articles for the Journal, and correspondence, to help us to formulate the Society's activities for the benefit of all.

The key to success lies in friendly co-operation between the members and their Group Directors and Council. We on the "staff side" are just ordinary people of all ages like yourselves, who have banded together to pass on the knowledge and enjoyment which we have gained, in some cases the hard way, from our following of astronomy. We are here to help you to appreciate in full the wonder and thrill that a knowledge of astronomy affords and which, in these days of worry and haste, can provide so pleasant and welcome a relaxation.

Meetings and lectures, under the leadership of experienced members of the Society are held by groups in various parts of the country, and we encourage members to get together and form new astronomical groups in their home towns and neighbouring localities. For those of you who are unable to join any of these groups, the Society offers postal courses in elementary astronomy and the night sky. Notices of the Society's activities will appear in the Journal from time to time.

The Survey of the Sky Section may attract those of you who possess small instruments such as opera glasses, binoculars, and small telescopes, whilst members who would like to try their hand at making their own equipment can obtain assistance and instruction from the Instrument Section. The Overseas Section is available to enable members to correspond with fellow enthusiasts in other countries, and we shall always be pleased to open new sections of common interest if required.

Let us know your needs. We shall be happy to receive your views and ideas, and the Society is ready at any time to reply to your questions and problems and generally help you to enjoy your astronomy in a full and friendly manner.

E. W. Turner,
THE PRESIDENT INTRODUCES

I should like to introduce to members in each issue of our Journal a distinguished figure from the ranks of professional and amateur astronomers. It gives me very great pleasure indeed to introduce to you as our first guest one of the most popular astronomers of today - Dr J. C. Porter.

J. C. Porter, B.Sc., Ph.D., F.C.S., F.R.A.S., Principal Scientific Officer to H. M. Nautical Almanac Office, Royal Greenwich Observatory, Herstmonceux Castle, has been President of the British Astronomical Association, now Vice-President, and for a number of years now also Director of its Computing Section. Well-known for his monthly radio talks under the heading of "The Night Sky" and also for his popular book of the same title, Dr Porter is undoubtedly in the forefront of popularizers of astronomy.

We have pleasure in presenting in this issue Dr Porter's article, "Let's Make a Start".

LET'S MAKE A START

by J.C. Porter, B.Sc., Ph.D., F.C.S., F.R.A.S.

If you are just beginning astronomy, you are most certain to be wishing you had a telescope, and wondering whatever you can do without one. I get many letters from young people in this position, and some of them annoy me very much - the ones that say "father is going to buy me a telescope what would you advise?" I always feel like being rude because any father who is willing to spend £30 to £50 on a small telescope is doing more harm than good. Telescopes are fetching a fantastic price and a really good one is quite out of the reach of most people. Perhaps you too are unable to buy a telescope - well, what are you going to do about it? Are you going to give up astronomy because you can't afford the telescope of your dreams? I hope not, because - and this is the main point of this article - ANY GLASS IS BETTER THAN NO GLASS AT ALL. You can get a good pair of field glasses very cheaply at a second-hand shop. Field-glasses, you notice, the sort of old-fashioned things that most people despise, field-glasses and not prism binoculars. The field-glass has much larger lenses and therefore picks up more light, and it is light you want for star-work, not magnification. The prisms in the more expensive binoculars absorb a good deal of light, besides having smaller lenses, and they are not recommended.

Now with a pair of field-glasses you can do some really useful work. You will use them at first to pick out such things as star clusters, like the Pleiades, or Coma Berenices, which are too big for a telescope, or the clusters in Perseus, and the long chains of stars in Cygnus and Perseus that make the Milky Way so interesting. Then
there are coloured stars like Mu Cephei, which Herschel once called "the garnet star", and wide double stars like Alpha Librae. And when you begin to know the sky really well, you can proceed to more advanced work. Learning to estimate the magnitudes of stars is not really difficult and the ability to do this may be quite useful. A few years ago a very fine piece of work was carried out by amateurs on the variable star Alpha Cassiopeia, and quite recently it has been shown (by amateurs using field-glasses) that the planet Uranus is decidedly brighter than the figure given in the Nautical Almanac. Perhaps Uranus is also variable?

Of course, a field-glass has a very low magnification (usually 3 times) and this will not content you for long—you want to see the moons of Jupiter, Saturn's rings, and the craters on the moon. Well, why not make a telescope? Most young people are fairly handy, and it is not difficult to fit a couple of suitable lenses in the ends of cardboard tubes. My first telescope was made that way, and even today I do a lot of observing with a little instrument that I made myself. An old marine's telescope was bought for 15/- in a pawnshop, the eyepiece and the inverting lenses (in the centre of the tubes) were removed and an astronomical eyepiece (frac3 to frac1 focal length) was fitted. The resulting instrument, aperture frac1, magnifying about 20 times, will show all the things I have just mentioned, and although far from perfect, gives a great deal of pleasure. I do strongly urge you to make some sort of telescope for yourself. You learn a lot while doing it. You can buy the parts if you like, but make the thing yourself and store the experience for the future when you build a really large instrument.

There are, of course, many people who are keen on astronomy, but will never have the patience to study faint markings on the planets under very bad conditions of frost and lack of sleep. For some of these the mathematical side of astronomy has a great appeal. No, I am not going to give you a lot of formulae—I just want to point out that if you like playing with numbers, there is a great deal to learn in astronomy. Let me give you just one simple case. During the early months of this year we had a fine view of the planet Venus as an evening star. Venus was at Greatest Elongation East on January 31 when will this happen again? The textbooks talk about synodic periods and give you formulae to work them out—but what an uninteresting way of doing it! Let us do it another way, using simple whole numbers (you can repeat the calculation if you like using all the decimals as well). The earth goes round the sun in 365 days, so that it covers 1/365 of a revolution in one day. Venus goes round in 224 days, so this planet in one day goes 1/224 of a revolution. Venus goes faster than the earth, so if they started together, when would they be together again? This is just like those silly sums you do at school about taps that fill and empty baths and I don't suppose you ever thought that sort of
sun would ever be useful! But it is just the same sum – Venus gains on
the earth by $1/365 - 1/224$ of a revolution every day. In decimals
this is $0.0046 - 0.00274$, that is, $0.00182$ of a revolution, so it
gains a whole revolution in $1/0.00172$ days. This comes to 581 days,
but a more accurate calculation gives 583.9 days, and so the next easter-
ern elongation of Venus will occur 583.9 days after January 31st.
This comes to September 7th, 1954.

The actual date will be a day earlier—the calculation given here
gives the average value of the synodic period, and it makes no allow-
ance for disturbances due to the other planets. The calculation of
these and of the paths of planets and comets generally, is quite dif-
ficult work, but it is well within the ability of anyone with enough
patience and love of figures and knowledge of trigonometrical tables
and logarithms. But even a computer must know his way about the sky,
and the first thing to do is to learn to recognise the stars and plan-
ets. The wonderful photographs that you see, taken with giant tele-
scopes, give you no idea at all of what you will really see for yourself
—the photographic plate does not record the same picture that the eye
sees. You can only get rid of this false impression by looking for
yourself, and I hope I have convinced at least some of you that the
amateur astronomer who is worth his salt is not the chap who pasters
father to buy him a telescope, but the fellow who gives up because it
is difficult, but the one who wants a telescope and makes up his mind
to do something about it. And if I have not said anything about girls,
it is simply because that last sentence was too difficult to write in any
other way—far more girls than boys are interested in astronomy, as I
know from my correspondence, but that's an added reason why they, too,
should take my advice. Remember, ANY GLASS IS BETTER THAN NO
GLASS AT ALL.

INTRODUCING

JASPER

WHO SAYS:

Watch the Next Journal for
Instructions on How to Construct Your
Own Amateur’s Telescope.

(Copyright reserved on Dr. Porter’s article),
OBSERVING WITH A GIANT TELESCOPE

by Patrick Moore, F.R.A.S.

(Council Member of the British Astronomical Association and Secretary of its Lunar Section. Fellow and Council Member of the British Interplanetary Society.)

I suppose that anyone who has taken any real interest in astronomy has had the wish to look through a really large telescope. We may have read about the giant reflectors of Mount Wilson, Mount Palomar, and the rest, and seen photographs taken with them; but even the best photograph is not the same as actually looking through the eyepiece.

The chance to do some work with one of the "giants" came my way fairly recently when I was invited to the Observatory of Meudon to do some lunar observation with the 33-inch refractor there. With me went Dr H. P. Wilkins, Director of the Lunar Section of the British Astronomical Association, and the world's leading authority on all matters connected with the moon.

Meudon Observatory, which is only a few miles from Paris, has been built on top of a steep hill. It was founded some eighty years ago by Janssen, one of France's greatest astronomers, and to begin with was a very humble place but it has grown into one of the most important observatories in Europe, and possesses the biggest telescope on this side of the Atlantic. Janssen himself was mainly interested in the sun, and it was he who first managed to see the "prominences", or red flames, without waiting for a solar eclipse: and Meudon has always been known as a solar observatory, though much other work is carried on there too.

The most striking feature of the Observatory is, of course, the great dome covering the 33" refractor. The great telescope itself is most imposing. The tube, which is square, is forty feet long, and as it is highly-mounted it reaches almost to the roof of the dome; to observe, one has to go up on an electrically-operated slung platform, sometimes to a height of fifty feet above the floor.

Our first observations at Meudon were made in April, 1952. I had not previously used any telescope larger than Dr Wilkins' 15½" reflector (my own reflector has a 12½" mirror), and I was hardly prepared for the splendid clearness and steadiness of view given by the Meudon instrument. As the moon came into the field, with the great crater-ring of Plato well placed, I realised at once that even with a fairly low magnification the tremendous light-gathering power made it possible to see details quite beyond the range of ordinary telescopes. I had the feeling that I could look right "into the moon", and examine the tiniest features of the rough lunar surface.

Some people believe that a giant telescope can be used only every
now and then when the air is particularly calm. That is not true. We stayed at Meudon for a week in 1952, and a further week in April 1953; sometimes the air was not steady, but usually the 33" gave good results and we were able to chart many new features of the moon which had not found their way into the maps.

Of course, the fact that observations are made with large instruments of this sort does not lessen the value of work done with smaller telescopes. As far as the moon is concerned, an ordinary 3" refractor will show details near the "limb" (the edge) which are not accurately mapped as yet, and a 6" can be used for very profitable planetary work. But for checking minute detail, with high powers, the Meudon giant comes into its own.

NOTE TO TELESCOPE CONSTRUCTORS.

Members of the J.A.S. who are considering making their own telescopes may be interested to hear that some lenses suitable for small instruments may be obtained through C.D. Reid (Director of the Instrument Section). Sizing of the lenses, with prices, are as below:

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Focal Length</th>
<th>Type</th>
<th>Price</th>
</tr>
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<tbody>
<tr>
<td>2½&quot;</td>
<td>25&quot;</td>
<td>achrom.</td>
<td>1½/-</td>
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<tr>
<td>2½&quot;</td>
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<td>1&quot;</td>
<td>25&quot;</td>
<td>simple</td>
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<td>1½&quot;</td>
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A design for a simple telescope utilizing a lens similar to the 1" mentioned above, and the ½" lens of 3" focal length will be printed in the next edition of this Journal. A design for a small telescope using one of the 2½" lenses, with two eyepieces giving ×25 and ×50 may be obtained from C.D. Reid at a price of 2/6 per copy. Plans are being made to supply the complete telescope, with tripod stand, for a price of about £5 plus carriage.

Any enquiries regarding the above lenses should be sent to:

C.D. Reid, F.R.A.S.,
27, Blake Way,
Seagrave Hall,
Chester.
THE ROAD TO SUCCESS

by E. H. Noon, F.R.A.S.

Astronomy is not the exclusive prerogative of the astronomer, it is a valuable heritage which all may enjoy.

Increasing numbers of ordinary men and women are discovering in astronomy a lasting recreation of absorbing interest.

The essential equipment for beginners is not necessarily a telescope or even a technical mind, it is a love of the night sky and a desire to know more of its wonders.

However, the beginner soon finds he is in need of encouragement and guidance. Our New Society is designed to meet both of these needs. Local groups will provide the encouragement by introducing us to new friends with like interests and difficulties, and coupled with the Journal, will provide guidance and deal with the difficulties.

Success of the Society is assured if we all become active members rather than passive listeners.

With the Journal, the same rule applies, for its lasting interest and existence will only come if members contribute to its pages and try to get many new subscribers. Therefore then, let each member resolve to contribute at least one comment or question at each group meeting. Let each group meeting resolve to contribute at least one report or article for the consideration of the Journal's Editor.

Finally, let us all resolve to obtain at least one new member then nothing can prevent the development of our already healthy 'Junior' into a Society of inestimable value to us all.

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ASTRONOMICAL MYTHS & HOAXES — 1

Gruithuisen's 'City of the Moon' by Richard M. Baum, F.R.A.S.

Sweeping the glistening surface of our satellite, either by means of a telescope, or through the medium of photographs, the impression gained is that the Moon is indeed a world, seemingly from our natural abode in space. What with the confused complexity of ringwall and mountain, and the pitiless harshness of light and shade, our travelling companion appears as an entirely different world, yet in some ways not entirely so.
At first glance, the moon shows many features to which we can offer no certain parallel on earth. Outstanding amongst them rank the celebrated Alpine Alley and the equally renowned Straight Wall, or Railway, as it is sometimes called. To these must be added many more features such as "Smil Mountains," and the bright ray systems. Yet in spite of their curious aspect, these objects upon the whole, have never created such an intellectual stir as did the discovery of a strange collection of mountains, just north east of the centre of the visible hemisphere.

Whilst studying this region on the 12th July 1822, a remarkable German astronomer, with the equally remarkable name of Franz von Paula Gruithuisen, discovered a system of ramparts strongly resembling terrestrial fortifications. So artificial was their whole aspect, that it required but little of Gruithuisen's lively imagination to consider that he had at last clambered upon, what many others had hoped to find - 'a city on the moon'.

The breathless excitement that followed the announcement of this discovery was immense, both in the scientific and lay world. Indeed as late as the 1850's, the 'lunar city' was mentioned in several novels. However, other astronomers began to observe the region of the 'city'. Lohmenn was unable to find it, nor was Miller at first. Later, the latter selenographer, or person who specializes in lunar study - was able to partially confirm the structure, as was Schwabe. To these and other observers, Gruithuisen's object showed as an irregular collection of hills radiating from a central range, which extended in a north to south direction. Indeed the configuration closely resembled the veins of leaf. This rather irregular aspect clashed quite strongly with the rather more artificial character given by the discoverer.

Modern observation has since partially settled the problem. Firstly, the feature does exist, though its appearance is not as regular as drawn by Gruithuisen, nor is it as irregular as depicted by Miller. Actually, the connected ridges forming this rampart system are only well seen when the terminator - boundary between light and shade - is very close; that is to say, the object is only well seen under conditions of oblique lighting. At other times it is difficult, if not impossible, to detect. When seen as the sun is rising on it, the formation shows as a set of hill ranges of no great elevation. Curious as it is, however, it is quite apparent that Gruithuisen's object owes its origin, not to some past intelligence, but to natural agencies.

Actually, the true existence of this 'walled city of the Selemites' would carry some rather interesting propositions with it. Firstly, that it would mark the existence of intelligent beings, or, if one wanted to be careful, the remains of a past civilization. Secondly, that at least two races were, or had existed on the moon, and thirdly, that these had been in conflict with each other, hence the fortified ramparts.
Attractive as these would seem, they belong to the dreams of past astronomers; so reluctantly we leave them to sleep on, whilst modern research unravels the old fancies of lunar cities and such like, to reveal objects as they really are.

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SOME FAMOUS TELESCOPES.

The history of astronomy is studded with the achievements of many famous instruments. Although the first telescope definitely recorded was that made by Hans Lipperhey in 1608, the first to be used for astronomical work was Galileo's. Galileo did most of his work with an instrument which magnified thirty-three times, the third he constructed.

Newton made two reflectors, (the first successful telescopes of that type to be made), the second of which is in the possession of the Royal Society. This instrument is 1½" in aperture, with a power of X35. Although Newton made his telescopes in the middle of the 17th century, no further effort to make others is recorded till Hadley's 6" made in 1723. Hadley's telescope had a focal length of 522" inches, and worked with powers up to X230. It was the equal in performance of any of the simple refractors then in existence, and very much easier to use.

The modern achromatic type refractor was first made by Chester Moor Hall in 1733, although John Dollond in 1758 was the first to make public the discovery. Objectives up to five inches in diameter were in existence by the end of the 18th century. Until Guinand developed a method of making large blocks of flint glass in 1805, nothing larger than 6" could be made. The Dorpat refractor of 9.5" was made from some of the earliest of the big blanks.

Meanwhile, William Herschel had been busy making his reflectors and had completed his 48" by 1789. It was 120 years before any telescope was made of twice the aperture of Herschel's, so the magnitude of his achievement may be appreciated.

During the 19th century, telescopes of large aperture multiplied rapidly. Lassell's 4; Lord Rosse's 6; are two reflectors which led to the Hooker 101" in 1910. Most of the largest refractors, that is, the Newall 25; Greenwich 28; Vienna 27; Pulkova 30; Mount 32; and Lick 36" and the Yerkes 40" were all made during the last century.

Each of the telescopes mentioned above has been thought remarkable for its size, performance, or the work done with it, and there are many more which could be added to the list.
NOTICES FROM THE SECTIONS

Sky Survey

I am happy to introduce myself to you as your Director of "Survey of the Sky Section" and to welcome you to our Society. I sincerely hope that your association with us will be a long and happy one, and that you will derive a great deal of benefit from your pursuit; besides contributing the results of your observations to the Society for the good of your Brother and Sister members.

If you feel that you would like to take part in the Survey of the Sky, I invite you to take part in this work. The objects of this section are to make serious observations of certain areas of the sky, noting the different types of stars therein. You will be instructed on the formation of constellations and how to identify different types of stars and you will then observe these over a period, making your own notes of changes and phenomena which you observe. On completing a period of observation you will send your reports to me for checking. If the results of your work are of sufficient interest they will be recorded in the Journal of the J.A.S., and noted in the Historical Records of the Society. Although Astronomy is the oldest science known to man, we are still very ignorant concerning some of the more familiar objects which we see, and your contribution may be of much benefit to future mankind.

If you have a telescope or binoculars please let me know the diameter of the objective lens so that I can get work suitable to your instrument. If you do not own a telescope, don't let this deter you from joining the Section as much useful observation can be accomplished with the naked eye. Movement of planets and meteors is a fascinating study for those who have to depend only on their eyes and much useful information can be obtained from these observations.

Incidentally, it was really due to meteors that my interest in astronomy commenced—when I was 10 years of age. One evening, I was startled by a shower of "Shooting Stars" and was so alarmed that I ran home as fast as I could, convinced that all the stars were dying and that the end of the world was just a matter of seconds! Realising the following morning that the world was still with us, I determined to find out all I could about the stars and of course, I have been learning ever since. I hope that you will help me to learn more, because very often a new observer can see details which the practiced observer has missed owing to his being too familiar with particular constellations—a case of not being able to see the wood for trees.
When writing to me, please state clearly your full name, address and age (if under 21), the type of telescope you have, or whether you wish to take part in "Naked Eye" observation. Please enclose a 2½d. stamp with your application.

STEPHEN BRADFORD (Director)
5, North Road,
East Boldon, Co. Durham.

Instrument Section

This section has been constituted to provide a service to those Members who are making their own telescopes. It is hoped to give practical advice on the solution of problems which crop up in the manufacture of telescopes and mountings.

It is further intended to give members advice on the best size and type of telescope to be used for the different classes of observational work undertaken. In this respect, it should be remembered that useful observational work can be done with no telescope at all (irregular variable stars provide one field of research), and that the beginner in practical astronomy is often more hindered than helped by a large, powerful telescope.

The Director will be pleased to answer any queries on instruments which members may care to send him.

C. D. KEIL, F.R.A.S. (Director)
27, Rake Way,
Saughall, Chester.

Overseas Section

It gives me great pleasure indeed to address you all for the first time. Although our Organisation has been in existence barely two months, I feel I am speaking not so much to members of a new Society as to members of a new Family. This is due, of course, to the particularly friendly atmosphere which exists amongst all who share an interest in our beloved science - astronomy.

Now this atmosphere of friendliness is not confined to us in Britain, but is prevalent all over the world. There is a fine spirit of co-operation between astronomers of every country, and we are going to strengthen that spirit by exchanging regular correspondence with members of our Society overseas.
First of all, we shall have to find out just which of our members would like some pen-friend abroad. Will all who are interested therefore, please let me have the following particulars: their name and address, date of birth, the country to which they propose to write, whether they speak the language of that country, the age and sex of the correspondent they would like, and any other information deemed necessary. Likewise, if anyone overseas reading this Journal would like to correspond with some member in Britain, will he or she kindly forward similar details?

As we write to people in other lands, we shall discover how universal astronomy is in its appeal. We shall hear stories like the one told to me only the other day by a gentleman in Belfast. He says that a friend of his, a public elementary school headmaster, became so interested in astronomy recently that he decided to use one of his classrooms for an evening lecture about the constellations. Both pupils and parents were invited, and the talk was to be illustrated by film strips. To the headmaster's amazement, a queue formed outside the door half-an-hour early; the parents brought five telescopes of their own; everyone stood chatting till nearly midnight. Two repeat performances had to be given on later dates to satisfy popular demand, and an Astronomical Society was formed with great acclamation. A most heartening story, don't you think?

Letters from abroad are always exciting to receive and one can learn so much from them. From correspondents beneath the equator come reports of the southern stars, eclipses invisible to us in the northern hemisphere, general news, and a great deal of other observational work which we are prohibited from making through reason of our position. In return, news of happenings in the northern hemisphere would be interesting to them.

By the way, do not be deterred by the language problem. One need not be brilliant at languages to get by, and for those who speak no other language, there are plenty of English-speaking countries abroad.

The Society is young yet, of course, and has many contacts yet to make, but if those members who would like to join the Overseas Section will get in touch with me I shall be happy to help them.

T. J. GROTON (Director)
40, Lynton Street,
Leigh,
Lanes, England
Notes and News

New Comet Discovered 1953

The first new comet to be detected this present year was found on April 12, at the Skalnate Pleso Observatory, Czechoslovakia. When discovered the object was of the 9th magnitude, in the constellation of Pegasus near the border of Delphinus. The discoverer was A. Mikos of the aforementioned observatory.

New Minor Planet

The National Geographic Society, Sky Survey at Palomer Observatory, announce the discovery of a minor planet by Albert Wilson. The object was detected on a Sky Survey plate on March 9, 1953, it then being seen against the stars in the southern regions of Ursa Major.

Astronomical Exhibition

We learn that the National Geographic Society has organised an exhibition of transparencies of star fields, nebulae and the planets, taken at the Mt. Palomar Observatory. The stellar photographs are those that have been taken for the Great Sky Survey. The exhibition is being held at Washington.

Society News

Morley College Group - Open Day and Conversazione

Saturday, May 16th, 1953, 3-5 - 9 p.m.

At its Open Day on May 16th, Morley College, London, provided a number of interesting demonstrations, exhibitions, lantern lectures and film shows.

Among its many exhibitions was one on Astronomy, arranged by the Society's group at the College. The majority of exhibits by this group were models, very well made by the members and laid out in an interesting manner. There were also photographs and instruments. Members of the group were kept very busy demonstrating the models and answering many questions from the interested visitors.

The Section was very well attended throughout the period, some notable people and Members of Parliament being among the visitors. With those who attended throughout the exhibition was our President, Mr. E.W. Turner, and Mr. J.H. Peters, the Director of the Chesterton Boys' School Group, Cambridge. Mr. Peters was accompanied by the group's representatives, David Lidtott (Secretary) and Ian Hudson (Treasurer), who had travelled from Cambridge for the occasion, bringing with them some exhibits by members of their group.
A film on Solar Prominences attracted a large audience, together with lantern slide shows of the 200-inch Palomar telescope, Planetariums and stellar photographs.

All members concerned are to be truly congratulated on their fine, well set-out work. The high standard of the material and the untiring efforts of the members, in particular the leadership shown by the Director, Mr. E.H. Noon, has, we are sure, done much to reveal to the public the interest which astronomy can give - and the source from whence friendly instruction and guidance in the subject can be obtained. In fact, the Society has already received enquiries from prospective members arising from the event.

The number of exhibits is too comprehensive to give in full, but the following afford some idea as to the variety of objects exhibited. It is regretted that the makers of many of the models were not known at the time of writing and are not, therefore, given here, but if those members of whom no note is made would like to inform the editor of their name and exhibit, mention will be made in the next number of the Journal.

a) Celestial Sphere, and a model showing the apparent opening and closing of Saturn's rings, by Mr. A. McLean, drew very much interest and attention during the day.

b) Model of the lunar surface illuminated to show shadows.

c) Model showing an eclipsing binary system.

d) Model showing how the apparent retrogression of Jupiter occurs at certain times in its orbit.

e) Models showing the difference in size of certain stars, and a model showing the increase of light in a nova.

f) 3-inch telescope with spectroscope showing sun's spectrum.

g) A gyroscope, magnetic compass, diagram showing how tides occur, and various planet's spheres.

h) Model illustrating the plane of the ecliptic by Mr. A. McLean.

i) Photographs of the moon taken with a 10-inch refractor by Mr. E.H. Noon,

j) Model of the planets, in a case showing the constellations by Robert Patman (Il) Cambridge.

k) Simple telescope X20 in rolled paper tube.
1) Simple star finder by Robert Monk (15) Cambridge.

m) Equatorial mounting made from a bicycle frame, together with photographs of the Lunar Eclipse 6.7/AC/1949, taken by 2" refractor mounted on same, by Mr. J.H. Peters, Cambridge.

n) Planisphere and constellations charts by Geoffrey Steggall (15) late of Cambridge Group.

(These last two exhibits drew much attention, especially the charts by Mr. Steggall, done on black paper with white paint).

e) Model showing Seasons. Model illustrating how a body contracts and flattens out according to its rotation.

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Junior Astronomers' Bookshelf


An important, and much awaited book by a celebrated writer, who is also an authority on the Moon. Written in a popular manner, the author takes the reader on a general exploration of the moon, injecting the journey with the amazing fascinations of older authorities. The work is up-to-date and is decidedly authoritative. To the active lunar observer or to the general reader, this work is strongly recommended as a must for the bookshelf.


A popular, descriptive presentation of astronomy and some facets on geology.


An introduction to astronomy for young and old alike. This is a basic text, describing the elementary points of the mysteries of the universe.

THE SUN, by Herbert S. Zim. Morrow 1953. pp. 64. 2.00 dollars.

This book discusses the sun, its place in the solar system and in the universe, and its composition. Solar phenomena and their effects on
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