

FROM THE DIARY OF A DELEGATE.**By ELEANOR A. LAMSON.**

Early in the morning of July 13, 1925, the train from London carried us up to Cambridge and after reporting at the headquarters of The International Astronomical Union in the Arts School, Benét Street, we started out to see a little of this famous college town on the Cam. A kindly official having informed us that where there was an open doorway in a college entrance was permitted, we promptly got lost in the narrow winding streets and the beautiful old courts and buildings dating from the middle ages.

To be lost in Cambridge is a joy to the average American, for failing to find a certain college one is very sure to stumble upon another fully as interesting. As we read our guide books remembering that Bacon, Milton, Tennyson, Macaulay, Thackeray, Isaac Newton and hosts of other worthies lived and studied in these halls, it was with a bit of a start we met an up-to-date college lad hastening to a tennis match. A great place for contrasts is Cambridge!

Desiring to inspect more closely a pleasing fountain in the center of one of the courts I started across the velvet turf, forgetting that only college dignitaries might tread thereon. A roar of "Grass" from a distance brought me to my senses and hastening to the walks I decided that, in the future, field glasses should be used for viewing distant objects surrounded by grass.

When the great doors of King's College Chapel swung open at 5 P. M. we entered the beautiful building and took part in the afternoon service which carried us back to the times of the founders, the Kings Henry VI and Henry VII of England. The sweep of the high roof, the astonishing carvings, the organ screen and stalls, and above all the superb stained glass windows, said to be quite the most beautiful in this section of England, produce a breath-taking picture, never to be forgotten.

Due to the courtesy of the officials of the University, quarters in the colleges were provided for many of the delegates during the days of the Union meetings, and it was my good fortune to be domiciled in Peile Hall at Newnham College, one of the two women's colleges of Cambridge. The buildings of this college surround the great gardens on three sides, the fourth side being open to the tennis courts, athletic field, etc. The grounds are very lovely with trees and shrubbery, flower beds, masses of gorgeous roses, and of course the characteristic velvet-like turf upon which, in this college, we were allowed to walk without fear.

Although it was long vacation time for the regular students, our

hall was occupied by about twenty young school teachers from the rural districts of England who, because of special qualifications, were being given an intensive two-weeks' course in history. The American visitors, for there were three of us at Peile Hall, were allowed the privilege of living in the college and following the general rules prescribed for these students. A most interesting and delightful arrangement, and the gracious hospitality shown us by the authorities of the college is greatly appreciated.

The formal opening of the Union meetings, or the Inaugural Ceremony, took place at 3:00 P. M. July 14 in the Senate House of the University situated in the center of the town. This large hall was crowded with delegates and visitors and scattered through the audience we noticed many familiar faces, our friends from the four quarters of the globe.

A hush fell upon the assembly as Lord Balfour, in the red robes of Chancellor of the University, entered attended by mace bearers. With great dignity and kindness he welcomed the members of the Union to Cambridge and expressed delight in the international coöperation of astronomers, the tying of the peoples of the earth together for discussion of matters of common interest. He mentioned the great progress made in recent years of the science of astronomy and the generous assistance of public-spirited millionaires who had provided the necessary funds for costly research work.

He then introduced Dr. W. W. Campbell, the President of the Union, who spoke of his satisfaction in seeing this large gathering of astronomers meeting in the great University where the standards of Newton, Adams, and Clerk-Maxwell were so worthily maintained by their successors now living.

Dr. J. H. Jeans, the next speaker, as Secretary of the Royal Society and as President of the Royal Astronomical Society, welcomed the over-sea visitors. He also stressed the value of international coöperation in the pursuit of knowledge. I liked his remark that "no one ever made a fortune out of astronomy," but as he said "it has done far more than its share in providing that vision without which the people perish." He touched upon the researches now being carried on in London and Cambridge as to the ultimate structure of matter. The meeting held in Rome might be called a memorial to Galileo, this one in Cambridge a pilgrimage to the memory of Newton.

The Astronomer Royal, Sir Frank Dyson, reminded the Union that it was the heir of the Solar Union, the conferences on the Carte du Ciel, and those of the Nautical Almanacs and of the Wireless. One of his expressions was quite amusing, speaking of the coöperation of mathematicians, physicists and engineers "as those patient observers who sit up at night and measure photographs and do sums in the morning."

At the close of the Inaugural Ceremony, wearing our identification "Stars" we attended the first of the series of receptions given in honor

of the Union during the Cambridge session. The host on this occasion was the Vice-Chancellor of the University, Professor A. C. Seward, who entertained the members at a delightful garden party at The Master's Lodge, Downing College.

The first business meeting of the General Assembly was held in the large lecture hall of the Arts School July 15 at 10:00 A. M., with President Campbell in the chair. We from Peile Hall sat on benches, somewhat hand-carved by industrious students, well up and back in the theatre where we could see and hear all that was going on. With Dr. Campbell were the General Secretary, Professor Fowler, the vice presidents, interpreters and recorders. The delegates from the several countries were scattered throughout the hall, although those from the United States at this and later sessions generally sat in a more or less compact group in front of us. In such a gathering the value of recorders and interpreters was quite evident since there were two official languages, French and English. Considerable amusement was created when an interpreter would start off in one language and unconsciously pass into the other, only to be brought back to the original by the laughter of his audience.

In a snapshot taken with my small camera at one of the meetings of the General Assembly there may be seen on the blackboard just back of the President the word "Tea" in capital letters. This pleasant function was never overlooked, and the afternoon meetings were so arranged that the members might participate in a typical form of English recreation.

We had received the carefully prepared book of reports of the thirty odd committees comprising the Union. This, which served as a sort of handbook, together with special pamphlets and sheets of agenda, which were distributed to the members, contained the subject matter for discussion at the meetings.

The President in his opening address stated the object of the Union which was organized in Brussels in 1919. This object was the international coöperation of astronomers along many lines of work, as for example the preparation of the *Astronomische Gesellschaft* Zone Catalogue, the *Carte du Ciel*, the Parallax and Variation of Latitude programs, etc. He stated his appreciation of the valuable work done by the General Secretary and by the several committees, mentioning in particular that of the committee on the *Carte du Ciel*, the completion of the work of which the Union had undertaken six years previously.

After the expeditious transaction of much necessary business, the proposals submitted to the General Assembly by the National Committees in an Agenda came up for discussion. The suggestions referring to the adoption of the name "Mean Greenwich Time" for the astronomical time counted from noon, and "Civil Greenwich Time" for that counted from midnight called forth the expression of many varying opinions, some serious and some humorous, from the delegates representing the various countries. This proposal together with two others

relating to the commencement of the Julian Day and the recommendation that astronomers should conform to the new practice of the Nautical Almanacs, counting any given day from midnight to midnight, were finally referred to committees which were to report their conclusions to the Union for final action.

At this meeting the advisability of reorganizing the Committee on Selected Areas under the auspices of the International Union was also discussed together with the work at the Brussels meeting in February, 1925.

In the afternoon we attended the garden party given by Professor and Mrs. Newall and Professor and Miss Eddington at the Cambridge Observatory and Madingley Rise. We entered the Observatory grounds by way of the great gate, and after being welcomed under the portico by our hosts and hostesses, passed into the main building. Here we were shown the clocks, the library, the exhibit of spectrograms, the mural circle, and what was to me the most interesting of all, the famous 8-inch transit circle with which the Cambridge A. G. Zone of $+25^{\circ}$ to $+30^{\circ}$ declination was observed. The view from the roof of the building was delightful for we could get a glimpse of the white domes of the equatorials, between the trees, the groups of people scattered about the grounds, the gay little tents and tea tables, and the beautiful walks with box hedges. After inspecting the several instruments in the Observatory grounds, we passed between the box hedges into Madingley Rise where we were graciously received by Mrs. Newall at tea in her lovely English garden.

In the evening the reception tendered the visitors by the Master and Fellows of St. John's College proved to be one of the most brilliant and stately affairs of the week.

The guests were received in the famous Combination Room of the college. The panelled walls of this room, the beautiful "plaster work" ceiling, the great carved fireplace, the portraits, the whole illuminated solely by candle light, made a charming picture. Passing through this lovely room we descended the staircase into rooms where there was an exhibition of Samuel Butler's paintings, and from there into the Great Hall, from the upper end of which we viewed the colorful crowd in "morning or evening" dress about the refreshment tables. We were then shown into the library with its valuable books and manuscripts. Many of these are of great age and quaintness and I wish I could relate some of the tales told of them by our friendly guide. An Irish vellum book of David with illustrations particularly took my fancy since we were informed that it was about 800 years old and the picture of Goliath standing on his head signified that he had been killed!

At the second meeting of the General Assembly in the forenoon of July 16, the recommendation that there be issued at least triennially a printed list of observatories, equipment, principal programs and personnel under the auspices of the Union, was discussed. This proposition, together with the one that there be made a revision of the limits

of the constellations were finally referred to committees for careful consideration. The General Assembly then adjourned to meet the following Tuesday, at which time the committees were to report upon their work.

The next four days were devoted largely to the morning and afternoon sessions of these committees, which were open to the members of the Union and where there was great freedom of discussion.

It should not be understood, however, that all of the time of the delegates was devoted to attendance upon committee meetings, for many interesting social affairs had been arranged for the week by our kind hosts. The receptions at the colleges, the excursion to Ely to see the cathedral, the visit to the Cambridge Instrument Works were all most enjoyable.

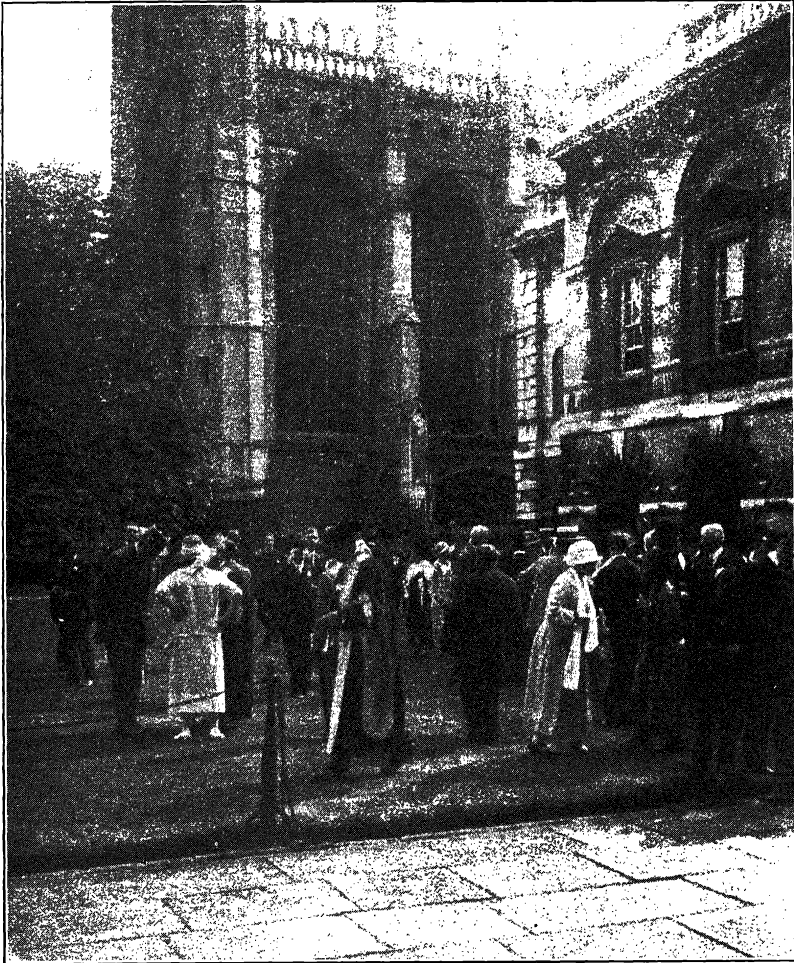
One of these interesting social affairs occurred the evening of the seventeenth. This was the reception and garden party given by the President and Fellows of Queen's College. Entering by the old gateway, we passed through a courtyard into a quaint little dressing room where we removed our wraps. Out through stone passageways, worn by the tread of students' feet for hundreds of years, we were welcomed by the President of the College at the entrance to Walnut Tree Court. It seemed as if we had stepped into fairyland, for here and there from the boughs of the great tree were suspended Japanese lanterns, while the paths were bordered on either side with hundreds and hundreds of candles in tiny colored glass vases.

From this court we were conducted through the President's study, the Combination Room and the Dining Room, all exceedingly interesting with beautiful furniture, wall panels, portraits of the two Queens who were the founders of the college, etc. At one place to our joy we could climb a few steps into a sort of cupboard from whence through a small window we looked down into the great dining hall of the students. As our guide remarked this lookout was quite needful for in the old days many of the boys entered college at a very early age and were decidedly scrappy, hence it was well for the Master to keep an eye upon them. The wig room, a small white stone cell where my lord used to powder his wig, was also visited, after which we passed down into the President's beautiful garden.

On the evening of Monday, July 20, at 9:00 P. M. we were invited to a meeting of the Cambridge Philosophical Society held in the lecture theatre of the Botany School. I imagine that pretty nearly all the scientists attended this meeting for two very interesting speeches were delivered (1) "The Structure of Light" by the Master of Trinity College, Sir J. J. Thompson, and (2) "The Internal Constitution of the Stars" by Prof. A. S. Eddington, F. R. S. This was not a business meeting, consequently smoking was allowed and we viewed the proceedings through a soft blue haze while near us a tired scientist went fast asleep.

The next morning, Tuesday, July 21, the General Assembly met in

the Arts School theatre and the several commissions or committees submitted their reports. As a whole these reports were accepted with but little discussion and in *The Transactions*, Vol. II, may be found the interesting details. It was really quite remarkable the large amount of work which had been accomplished during the session of nine days.



The Members of the Union in front of the South Door of the Senate House,
July 21, 1925, Cambridge, England.

At the invitation of the Dutch Government (presented by Dr. De Sitter) it was decided that the next meeting of the International Astronomical Union should be held in Holland in 1928.

Tuesday afternoon a very impressive ceremony took place in the Senate House, i. e., the conferring of the Honorary Degree of Doctor of Science upon Dr. Campbell, Dr. Baillaud, Professor De Sitter, Pro-

fessor H. Nagaoka, and Dr. Schlesinger. Each man to be so honored, clad in red robes, was escorted by a mace bearer to the Vice-Chancellor of the University, also in robes of state, while the public orator in sonorous Latin delivered a poetic description of the valuable work accomplished by the candidate. This ceremony was followed by the conferring of degrees upon a number of the undergraduates of the colleges, after which the members of the Union and friends assembled outside the south door of the Senate House for the usual group photograph.

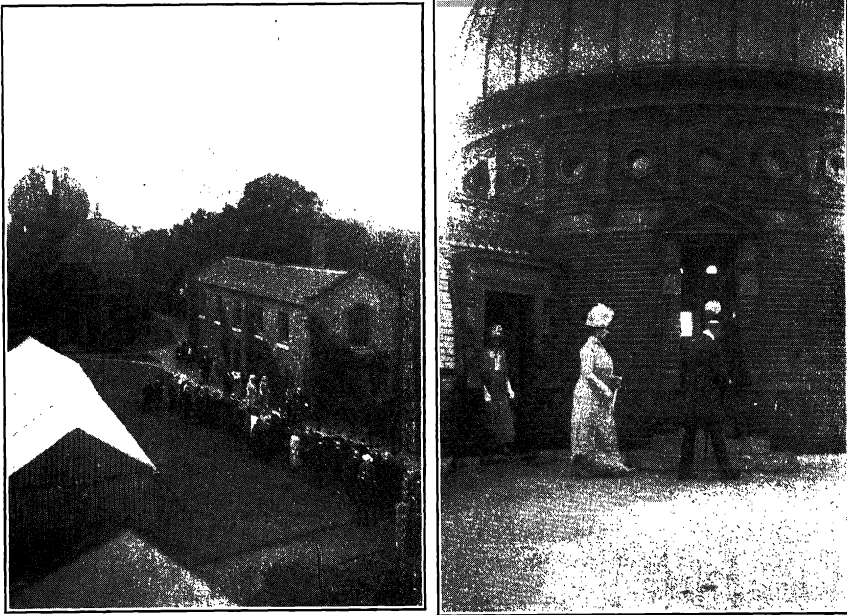
In the evening while the men of the Union were being entertained at dinner by the Master and Fellows of Trinity College, the ladies were dining in Old Hall at Newnham College upon the invitation of the Principal. At the close of dinner we were received by Lady Thompson, the wife of Sir J. J. Thompson, at Trinity College.

A most delightful climax to this meeting of the Astronomical Union in England was the visit to Greenwich Observatory upon the invitation of the Astronomer Royal, Sir Frank Dyson. The occasion was the 250th anniversary of the founding of the observatory, and this, together with the fact that the King and Queen were to be in attendance, the fortunate recipients of invitations made every effort to be present. In London (July 24) we took the early afternoon train for the quaint old town of Greenwich, and by tram proceeded through the town to the foot of the hill upon the top of which the observatory is situated. It seemed as if all the world was wending its way on foot up through Greenwich Park to the walls surrounding the observatory grounds. Just as we entered this park the boys in uniform from the Royal Hospital School, headed by their band, marched up the hill and lined up near the main gateway to the observatory. Armed with our credentials, we were escorted under the ropes to a small door near the great gate, the "needle's eye," and there entered the world-famous Greenwich Observatory.

There were so many interesting things to see as with the crowd we wandered at pleasure through these old rooms, one is rather at a loss as to what of all this wealth to describe. To me the famous old mural circle with which Flamsteed made his historic star observations was most appealing, but best of all and the thing which gave me the greatest thrill was the Meridian Circle swinging in its pit—the Zero Meridian of the World.

The time approached for the arrival of their majesties so we hastened out under the portico facing the main courtyard and not far from the great gate through which the royal party was to enter. It seemed as if we were surrounded by the nations of the earth for we could distinguish our Union friends scattered among the English guests on every hand. At the entrance to the Octagon House were Sir Frank and Lady Dyson with other notables anxiously awaiting the arrival of the royal party, and directly across the courtyard the boys composing the Hospital School band. Suddenly the great gate opened and

in swept the royal automobiles. The King and Queen descended from their car, were welcomed by their hosts and passed into the Octagon House, after which we went through the great garden to the large new building housing the double photographic telescope. After wandering about the lower floor viewing the beautiful exhibit of spectrograms, photographs of comets, the moon, nebulae and so on we climbed the narrow stairway to the big dome. As at Cambridge Observatory, there are two equatorials mounted on one pier, a 30-inch reflector and a 26-inch refractor, and this being an unusual combination to me I viewed it with much interest.



The Visit of the King and Queen to Greenwich Observatory.

With several of our friends we were out on one of the roof platforms, from which the royal standard was displayed, when we saw the royal party coming along the garden walk. It was a very beautiful sight. In the distance the roofs and domes of the observatory showing above the treetops, and nearer, the garden with its tea tent, its crowds of festively attired people who lined the walk as royalty approached our building. As their majesties came up the steps at the entrance they were visible to the huge crowd congregated outside the walls and a great cheer arose. Presently at the narrow doorway opening on our platform appeared the Astronomer Royal followed by the King, Queen, Lady Dyson and several members of the royal party. For a moment they paused, then went on up into the great dome. After a short time Sir Frank Dyson reappeared, and since it had been sprink-