Sub-Committee of the X-ray Analysis Group of the Institute of Physics. In this exhibition 36 firms participated, and descriptions of their exhibits were included in an Exhibition Handbook which was distributed to all members of the Congress.
(b) There was also organized an exhibition of apparatus, diagrams, etc., offered by individual members of the Congress to illustrate techniques or procedures which they had developed, or results which they had obtained.
(c) The Commissions on Crystallographic Data and Crystallographic Teaching had jointly arranged for an exhibition of books on crystallographic and closely related subjects, of tables and charts, and of various aids to teaching. A catalogue of the books on display, classified by subjects, had been prepared by the secretaries of these Commissions, and was available in the exhibition room.
(d) An unusual exhibition was a collection prints and of drawings by M. C. Escher, in whose work crystallographers can see ideas familiar to them interpreted by an artist. Mention should be made here of a delightful lecture on 'Antisymmetrical arrangements in the plane, and regular three-dimensional bodies as sources of inspiration to an artist', given by M. C. Escher at the session on symmetry.

## (3) Social arrangements

(a) In view of the limited hotel accomodation in Cambridge, the Congress Executive had arranged for most members of the Congress to have rooms in Colleges, and a debt of gratitude is owed to the following ten Colleges and their staff for the great hospitality received: Christ's, Clare, Downing, Emmanuel, Girton, Gonville and Caius, Pembroke, St Catharine's, Sidney Sussex and Trinity.
(b) For the members of the Congress the following programme of social events was organized. On 16 August a reception was given in the Old Schools by the University of Cambridge. The Mayor and the Corporation of the City of Cambridge received the Congress at a reception in the Guildhall on 17 August before lunch. For the evening of the same day a Wine and Cheese Party had been arranged by the Directors of Research and Control Instruments Ltd on behalf of the Philips Companies throughout the world. On 18 and 19 August special Congress Dinners were offered by the Congress Executive in the following Colleges: Downing, King's, St Catharine's, St John's and Trinity; and on 18 August also in the University Arms Hotel. An Orchestral Concert by the Philomusica Orchestra of London in King's College

Chapel on Saturday night 20 August closed the series of social events.
(c) Already in June a brochure had been sent to all persons who had registered for the Congress, with full details of a list of selected visits and excursions, four of short, six of medium and nine of long duration, to places of interest in Cambridge and the surrounding districts. These visits and excursions took place during the afternoons of 17 and 21 August, and no charge was made for participation in any of these and the other events.
(d) A further programme of social events had been arranged for the accompanying members, and warm thanks are due to the Ladies' Committee consisting of Mrs A. Taylor (Chairman), Mrs Cochran, Mrs Gay, Mrs Hirsch and Mrs Nockolds (members) for organizing this programme which made the stay in Cambridge of the accompanying members still more pleasant and interesting. This programme included a lecture by G. F. Hickson on 'The City and University of Cambridge', and a Garden Party at the Master's Lodge of Gonville and Caius College, by invitation of Mrs Mott, on 15 August; a visit to Girton College on 18 August, where a short talk on the education of women in Cambridge was given; and various visits and excursions on 16, 18, 19 and 20 August.

## Symposia

Following the Congress, two Symposia were held, devoted respectively to "Thermal motion in crystals and molecules' and 'Lattice defects and the mechanical properties of solids'. The general introductory lectures, given within the Congress period on 20 August, were as follows:
J. C. Slater. The interaction of mechanical and electromagnetic waves in crystals.
N. F. Mott. Lattice defects and the mechanical properties of solids.

About thirty papers were presented at the first Symposium during four morning and evening sessions on 22 and 23 August, the afternoons being left free for discussions. The number of contributed papers for the second Symposium exceeded ninety; they were read during nine morning, afternoon and evening sessions on 22, 23 and 24 August.

The procedure at the Symposia was practically the same as that at the Congress for those topics which had not been treated under the Rapporteur system; after each paper there was opportunity for informal discussion. Abstracts of the papers presented at the Symposia had also been distributed in advance to the registered members, and are republished elsewhere in this issue.

## Statutes and By-Laws of the International Union of Crystallography

The Statutes and By-Laws were adopted by the Fourth General Assembly, Montreal, July 1957, and amended by the Fifth General Assembly, Cambridge, August 1960.

## STATUTES

## 1. Objects of the Union

$1 \cdot 1$. The objects of the Union are
(a) to promote international co-operation in crystallography;
(b) to contribute to the advancement of crystallography in all its aspects, including related topics concerning the non-crystalline states;
(c) to facilitate international standardization of methods, of units, of nomenclature and of symbols used in crystallography;
(d) to form a focus for the relations of crystallography to other sciences.
1.2. For these purposes the Union shall have the power
(a) to adhere to the International Council of Scientific Unions;
(b) to organize international meetings and conferences on subjects falling within the purview of the Union;
(c) to promote international publication of crystallographic research and of crystallographic works;
(d) to set up Commissions or other bodies for special objects;
(e) to initiate, promote and co-ordinate crystallographic research requiring international cooperation;
(f) to organize Special Projects which shall be financed independently of the regular operations of the Union;
(g) to participate in Joint Commissions with other Unions or other scientific bodies in matters of interest to the Union.

## 2. Membership

$2 \cdot 1$. The members of the Union are its Adhering Bodies.
$2 \cdot 2$. There shall be only one member for each Country.
$2 \cdot 3$. The term 'Country' shall be understood to apply to any geographical area with an independent budget for scientific purposes. It shall also apply to any group of Countries which agree to name an Adhering Body and to form a National or Regional Committee for Crystallography. Whenever the term National Committee for Crystallography is used elsewhere in these Statutes or in the By-Laws it shall be taken to include Regional Committees for Crystallography.
$2 \cdot 4$. A Country may adhere to the Union through its National Academy, National Research Council or similar body, or through a scientific society or group of such societies. Each Adhering Body shall form a National Committee for Crystallography to represent it in the Union.
2.5. Membership of a Country in the Union shall be fully effective when the nature of the Adhering Body and the membership of the National Committee has been reported to and recognized by the General Assembly. Any major change in the nature of an Adhering Body shall be considered valid only after it has been reported to and recognized by the General Assembly.
$2 \cdot 6$. Adhesion to the Union shall be in one of five Groups I-V with corresponding voting powers and contributions as set out in Statutes 4.5 and 8.4. Each Country wishing to adhere to the Union shall specify in which Group it wishes to adhere; this choice of Group, or any change in the Group in which a Country adheres, is subject to the approval of the Executive Committee and confirmation by the General Assembly.
2.7. Participation in Special Projects [Statute 1.2(f)] shall not be obligatory. The extent of financial participation shall be a matter for special negotiation for each such project, except that the relationship between contribution and voting power within the project shall be that of the Group scheme defined in Statutes 4.5 and 8.4 to determine this relationship in the General Assembly.
$2 \cdot 8$. Each National Committee has the right to submit to the Union through the General Secretary questions within the competence of the Union.
2.9. Any Country may withdraw from the Union if it has fulfilled its obligations. A Country which withdraws from the Union, or any Country whose membership is cancelled in accordance with Statute $4 \cdot 12$ or $8 \cdot 9$, loses all rights in connexion with the Union.

## 3. Administration

$3 \cdot 1$. The work of the Union shall be conducted by
(a) the General Assembly;
(b) the Officers of the Union, constituting the Executive Committee;
(c) the Commissions as defined in Statute 7•1.

The composition and function of these bodies are defined in the following paragraphs, whose application is governed by the By-Laws.
3.2. The Union shall have no Officers honoris causa, except for Professor Max von Laue, elected as Honorary President by the First General Assembly.

## 4. General Assembly

$4 \cdot 1$. The work of the Union shall be directed by the General Assembly which is composed of delegates appointed by the Adhering Bodies.
$4 \cdot 2$. The Executive Committee is responsible to the General Assembly and shall participate in its deliberations. Members of the Executive Committee have no voting power as such, but they may vote if they are members of national or regional delegations.
$4 \cdot 3$. The General Assembly shall, as a rule, hold an ordinary meeting once every three years. The date and the place of the meeting, unless determined by the previous General Assembly, shall be determined by the Executive Committee. The General Secretary shall communicate the date and the place of the meeting to the National Committees and to the Commissions at least twelve months in advance.
4.4. In special cases, the President of the Union, with the consent of the Executive Committee, may call an extraordinary meeting of the General Assembly. He shall do so at the request of half or more of the Adhering Bodies. The routine business of a General Assembly prescribed in Statute $4 \cdot 10$ shall normally be omitted, unless specifically included in the agenda; but an extraordinary General Assembly shall have the same powers, and be subject to the same rules, as an ordinary General Assembly, except where otherwise is stated in the Statutes and By-Laws. The General Secretary shall communicate the date and the place of the extraordinary General Assembly to the National Committees and to the Commissions at least eight months in advance if amendment of the Statutes is contemplated, or at least four months otherwise.
$4 \cdot 5$. Voting power at General Assemblies shall be allocated by Countries, which shall have votes in accordance with the Group in which they adhere, as follows

| Group | I | II | III | IV | V |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Number of votes | 1 | 2 | 3 | 4 | 5 |

$4 \cdot 6$. Each Adhering Body, through its National Committee, shall make known to the General Secretary before the opening of each General Assembly the names of its
delegates (and of their alternates, if any), and also the name of the chairman of the national or regional delegation. Neither the President nor the General Secretary of the Union may be a member of any delegation, nor shall one person serve as a member of more than one delegation.
$4 \cdot 7$. Normally each of the delegates present at a General Assembly shall have one vote only, but when for special reasons a Country cannot be fully represented at a General Assembly it may distribute its votes among a number of delegates smaller than the number of votes which that Country has in accordance with the Group in which it adheres. Any Adhering Body not represented at a General Assembly may forward its views to the General Secretary by letter, and such views shall be made known to the General Assembly if received before voting takes place.

4-8. Except where otherwise provided in the Statutes and By-Laws decisions of the General Assembly are taken by a majority of the votes cast. In the event of an equal division of votes the Chairman shall take the final decision.
$4 \cdot 9$. No question which has not been placed on the agenda of business to be transacted at the General Assembly shall be discussed or put to the vote unless a proposal to that effect be approved by at least twothirds of the votes there represented.
4•10. The General Assembly shall
(a) take action on the recognition of Adhering Bodies and their National Committees [Statute 2.5];
(b) elect the President, the Vice-Presidents, the General Secretary and the other Officers of the Union [Statute 5•1];
(c) confirm the appointments of Editors of publications of the Union [Statute 6.1];
(d) elect the Chairmen and members of the Commissions [Statute 7.2];
(e) elect representatives of the Union on Joint Commissions with other Unions, and on other scientific bodies [Statutes $1 \cdot 2(g)$ and 7.5];
$(f)$ receive the reports on the activities of the Union and of its Commissions [Statutes $5 \cdot 6$ and 7.4];
(g) receive the audited accounts for the years elapsed since the previous General Assembly [Statute 8.1];
(h) on receipt of satisfactory reports or accounts, release the General Secretary, or any other Officer, or the Chairman or any member of any Commission or other body, from financial or other liability to the Union;
(i) receive the budget for general expenditure for the period to the next General Assembly [Statutes 8.2 and 8.3];
( $j$ ) determine the unit contribution for the period to the next General Assembly [Statute 8.5];
(k) determine the general policy and the timetable for the period to the next General Assembly.

4•I1. The General Assembly shall have the power
(a) to amend these Statutes in accordance with Statute $11 \cdot 1$;
(b) to formulate and amend By-Laws on any matters not covered by these Statutes;
(c) to set up any Commission or other body it may deem necessary for the administrative and scientific work of the Union, and to determine the terms of reference of such body [Statute 1-2(d)];
(d) to determine the nature of the Special Projects which shall be financed independently of the regular operations of the Union [Statute 1-2(f)];
(e) to decide on all other questions falling within the competence of the Union.
4•12. The General Assembly may cancel the membership of any Adhering Body of the Union for any serious cause; such a decision may only be taken after the member in question has been previously given an opportunity to furnish an explanation to the Executive Committee for forwarding to the General Assembly. At least threefourths of the total number of the votes of all Adhering Bodies are required for cancellation.

## 5. Executive Committee

$5 \cdot 1$. The Officers of the Union elected by the General Assembly and constituting the Executive Committee are
(a) the President;
(b) two Vice-Presidents;
(c) the General Secretary;
(d) the retiring President;
(e) six ordinary members.

There shall be not more than two Officers from any one Country, nor shall any one person hold two offices simultaneously.

5-2. The President holds office as President until the close of the ordinary General Assembly following his election, and continues as a member of the Executive Committee until the close of the ordinary General Assembly next but one following that of his election. He is not eligible for immediate re-election to the office of President, nor to any other office in the Executive Committee.

One Vice-President and three ordinary members are elected at each ordinary General Assembly and hold office until the close of the ordinary General Assembly next but one following that of their election. They are not eligible for immediate re-election to the same office.

The General Secretary holds office until the close of the ordinary General Assembly following that of his election. He is eligible for immediate re-election, but shall not serve for more than three full consecutive terms of office.

In the event of a vacancy, through resignation, death or other cause, any Officer elected by the General Assembly to fill the unexpired term of office shall serve only to the end of the normal term of the Officer he replaces; at the end of this service he may be nominated for re-election for a full term to the same office.
$5 \cdot 3$. The Executive Committee shall carry out the decisions of the General Assembly and give effect to the general policy of the Union as determined by the General Assembly.

5•4. During the periods between General Assemblies the Executive Committee shall have full power to carry on the business of the Union in all matters not specifically assigned by the Statutes, the By-Laws or the General

Assembly to individuals or to Commissions or other bodies. If necessary, it may make ad-interim arrangements in all matters assigned by the Statutes and ByLaws to the General Assembly.
5.5. In the event of an individual, a Commission or another body of the Union failing to act in any matter assigned to him or it by the Statutes, By-Laws or the General Assembly, the Executive Committee may, after reasonable notice to the individual or body in question, take action on behalf of the Union.
5.6. The Executive Committee shall report on its activities to the General Assembly. The actions taken by the Executive Committee in accordance with Statutes $2 \cdot 6,5 \cdot 4,5 \cdot 5,6 \cdot 1,6 \cdot 2$ and $8 \cdot 9$ shall be included in this report. The report to the General Assembly shall be dispatched by the General Secretary to the National Committees and to the Commissions at least ten weeks before the meeting.

## 6. Publications of the Union

$6 \cdot 1$. The Editors of the publications of the Union are appointed by the Executive Committee for initial terms extending through not more than six years beyond the ordinary General Assembly following the appointment. Each initial appointment is subject to confirmation by that General Assembly. Reappointments may be made by the Executive Committee for terms of not more than three years, and are subject to confirmation by the ordinary General Assembly following the reappointment. The number of reappointments is not limited.
6.2. Co-Editors and Assistant Editors are appointed by the Editors for terms of not more than three years, but they may be reappointed immediately for terms of the same length. The appointments and reappointments are subject to the approval of the Executive Committee. The number of reappointments is not limited.
$6 \cdot 3$. Editors and Co-Editors are members of the Commissions set up for their respective publications.

## 7. Commissions and Joint Commissions

7.1. The term 'Commission' shall be understood to include all Commissions, Committees, and other bodies of the Union with the exception of National or Regional Committees for Crystallography, and the Executive Committee and its sub-committees.
$7 \cdot 2$. The Chairmen and members of the Commissions are elected at each General Assembly. Subject to the approval of the Executive Committee, Commissions may co-opt further members during the periods between General Assemblies, and may fill vacancies arising from resignation or death. Members (but not Chairmen) may be nationals of or residents in a Country not adhering to the Union.
$7 \cdot 3$. The Commissions shall be responsible to the General Assembly. They shall generally have full freedom in arranging their internal structure and work. They may formulate their own Rules of Procedure within the framework of the Statutes and By-Laws of the Union, and within their terms of reference.
$7 \cdot 4$. The Chairmen shall report on the activities of the Commissions to the General Assembly. These reports shall reach the General Secretary at least fourteen weeks before the General Assembly and shall be dispatched by
him to the National Committees and to the Commissions at least ten weeks before the meeting.
7.5. The representatives of the Union on Joint Commissions and on other scientific bodies [Statute $1 \cdot 2(g)$ ] are elected at each General Assembly. For each such body one representative shall be designated as the chief representative of the Union. His obligations to report are the same as those of the Chairmen of the Commissions.

## 8. Finance

8.1. The Executive Committee shall be responsible to the General Assembly for all the financial affairs of the Union and the General Secretary shall act on its behalf as Treasurer of the Union.
$8 \cdot 2$. The Chairman of each Commission (or other member approved by the Executive Committee) shall be responsible to the Executive Committee for any expenditure of funds by his Commission. Five months before each General Assembly he shall submit to the General Secretary an estimate of the budget of his Commission for the period between that General Assembly and the one following it. He shall submit annually to the Executive Committee a revised budget for the ensuing year and a statement of accounts for the preceding year. His accounts shall be available for audit by the Executive Committee or its appointees.
8.3. The Executive Committee shall prepare an estimate of the budget for the period between the next General Assembly and that following it. This estimate shall be dispatched by the General Secretary to the National Committees and to the Commissions at least ten weeks before the meeting.
8.4. Each Adhering Body shall pay an annual subscription in accordance with the Group in which it adheres, as follows

| Group | I | II | III | IV | V |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Number of unit contributions | 1 | 3 | 6 | 10 | 15 |

8.5. The unit contribution, stated in terms of a currency to be designated by the Executive Committee, shall be determined by the General Assembly for the period to the next General Assembly.
$8 \cdot 6$. The financing and management of publications of the Union shall be kept distinct from general expenditure. Editors and Co-Editors shall be responsible to the Executive Committee for any receipts or expenditure of funds by them with respect to their publications.
8.7. The financing and management of Special Projects of the Union shall be kept distinct from the regular operations of the Union, and Adhering Bodies shall be pledged only for those Special Projects in which they participate.
8.8. Each Adhering Body is responsible for the payment of its annual subscription, which shall be payable during the calendar year to which it applies.
8.9. Any Adhering Body which is in arrears with its subscription for two years shall be warned and shall be deprived of its voting power. The membership of any Adhering Body which is in arrears for four years shall be automatically suspended and may be cancelled by the General Assembly under Statute 4•12. An Adhering Body whose membership has been suspended shall receive no privileges of the Union and incur no further responsibility
for dues; it may be reinstated by action of the Executive Committee.
$8 \cdot 10$. No funds may be solicited or accepted on behalf of the Union or any of its Commissions from any international, governmental or other agency or person without the prior approval of the Executive Committee. Any National Committee for Crystallography may however solicit funds within its own Country (or Countries) for the support of its own activities or in its capacity as host for a General Assembly, Congress or other meeting sponsored by the Union. Any funds in the form of donations, legacies, or grants, accepted by the Executive Committee shall be used so far as is possible in accordance with the wishes of the donors.
8.11. In the event of dissolution of the Union in accordance with Statute $10 \cdot 2$, the General Assembly shall appoint a special Committee, reporting to the International Council of Scientific Unions, for the liquidation of the assets of the Union. The nett assets shall be given to one or more, preferably international, organizations or institutions which shall spend the assets for purposes so far as is possible in accordance with the objects of the Union.

## 9. Domicile and Representation of the Union

$9 \cdot 1$. The legal domicile of the Union shall be the place where the General Secretary conducts his business.
$9 \cdot 2$. The Auditor of the Union shall be a person or corporation authorized to act as a public accountant in the legal domicile of the Union, recommended by the General Secretary, and approved by the Executive Committee.
$9 \cdot 3$. All contracts and agreements involving the Union shall be signed by two of the following Officers of the Union: the President, the Vice-Presidents and the General Secretary. The Executive Committee may restrict the power to sign a particular document or type of document to specific persons among the above-mentioned Officers.
9.4. The President shall be the official representative of the Union on all other civil and legal occasions and in dealing with other organizations. He may in this respect delegate his powers to a Vice-President, the General Secretary or an ordinary member of the Executive Committee, or, with the approval of the Executive Committee, to any other person.

## 10. Duration of the Union

$10 \cdot 1$. The duration of the Union is not limited.
$10 \cdot 2$. The Union shall not be dissolved except on a motion presented at a General Assembly. If a motion to motion presented is to be presented, the notice for that General Assembly as given under Statute 4.3 or 4.4 shall include a statement of the motion to dissolve and shall refer specifically to this Statute. Such a motion shall be presented to the General Assembly without amendment and at least three-fourths of the votes there represented shall be required for dissolution.

In the event that less than three-fourths of the total number of the votes of all Adhering Bodies are represented at the General Assembly, a postal ballot shall be demanded, and in such a postal ballot at least threefourths of the total number of the votes of all Adhering Bodies shall be required for dissolution.

## 11. Statutes

11•1. Amendments to the Statutes require action at a General Assembly. An amendment is adopted at such an Assembly only if (i) at least two-thirds of the votes represented at the General Assembly are affirmative and (ii) if these affirmative votes amount to more than half the total number of the votes of all Adhering Bodies. In the event that the vote on a proposed amendment satisfies condition (i) but not condition (ii), tho Executive Committee may refer the proposed amendment to a postal ballot of the Adhering Bodies. If the proposed amendment then obtains affirmative votes amounting to more than half the total number of the votes of all Adhering Bodies, the amendment is adopted.

Proposals for amendments may be made by the Executive Committee or by any National Committee. Such proposals made by National Committees shall reach the General Secretary at least six months in advance of the General Assembly. The General Secretary shall dispatch these proposals, and those made by the Executive Committee, to the National Committees and to the Commissions at least four months before the meeting.
$11 \cdot 2$. The present English text shall be considered the authoritative text in the interpretation of these Statutes. Where disputes arise concerning this interpretation, the matter shall be decided by the General Assembly, or, during the periods between General Assemblies, by a ruling of the President of the Union.

## BY-LAWS

## 1. General Assembly

1.1. The agenda of business to be transacted at a General Assembly shall be determined by the Executive Committee and shall be dispatched by the General Secretary to the National Committees and to the Commissions at least ten weeks before the meeting.
$1 \cdot 2$. Any National Committee and any Commission of the Union may propose business to be transacted at a General Assembly. Such proposals shall reach the General Secretary at least five months before the meeting, and shall be included in the agenda of the General Assembly.
$1 \cdot 3$. Chairmen of the National Committees and of the Commissions may attend the General Assembly and take part in the discussions but shall have no voting power. The President may invite representatives of scientific bodies, or individuals, to attend the General Assembly; such invited guests may take part in the discussions but shall have no voting power. Other interested persons may also attend the General Assembly but they shall not take part in the discussions, unless specifically invited or permitted to do so by the Chairman, and they shall have no voting power.

At the discretion of the Chairman any or all of the persons attending the General Assembly under this By-Law may be required to withdraw; they shall withdraw where is so prescribed elsewhere in these By-Laws.
$\mathbf{1} 4$. If a delegate to a General Assembly is absent from a session of the Assembly, his place may be taken by any of the alternates nominated to the Assembly under Statute $4 \cdot 6$ provided that the Secretary of the Assembly is notified before the beginning of the session of the name of the delegate and of the name of the alternate, either by the delegate or by the chairman of his delegation.

In general no such substitution may take place during a session of the Assembly, but the Chairman of the Assembly may permit substitution to be made under special circumstances.
$1 \cdot 5$. The names of the representatives of a Body whose application for adhesion to the Union has been received and declared in good order by the Executive Committee under By-Law 2•9(a), shall be made known to the General Secretary as prescribed in Statute $4 \cdot 6$, and these representatives shall be seated with the national and regional delegations during the preliminary ceremonies. Consideration of the admission of new members shall take precedence over all other business at the first business session of the General Assembly. It shall precede the reading of the minutes and the discussions of matters arising therefrom. The representatives of new members may not vote on their own admission nor on that of any other Country at the General Assembly at which they themselves are admitted. During the discussion of and the voting on the admission of new members, their representatives, and all persons attending the General Assembly under By-Law 1-3, shall withdraw; but this shall not exclude the possibility of an invitation by the Chairman to specified persons to present information to the General Assembly during the discussion.
1.6. The General Secretary shall post on the official bulletin board of the General Assembly the names of the Chairmen and members (and alternates, if any) of the delegations and the numbers of votes represented by them.
1.7. During the General Assembly any delegate (or alternate) and any Officer of the Union is considered to have been notified of any action of the General Assembly, or of the Executive Committee, or of any Commission, if one of the two following procedures is adopted
(a) a notice is placed in the mail box or other location at which the delegate (or alternate) or the Officer is accustomed to receive his mail during the course of the General Assembly, or
(b) a notice is handed to the designated Chairman of each delegation with the specific request that he communicate its contents to his delegation, and to the General Secretary with the specific request that he communicate its contents to the Executive Committee,
provided that in either case a similar notice is posted on the official bulletin board.
1.8. Minutes of the meetings of the General Assembly shall be made. Copies of the draft minutes shall be communicated by the General Secretary to the National Committees, to the Officers of the Union and to the Chairmen of its Commissions. After approval at a subsequent General Assembly, two copies of the definitive minutes shall be signed by the Chairman and the Secretary of the session at which they are approved, and shall be kept by the President and the General Secretary.

## 2. Executive Committee

$2 \cdot 1$. The Executive Committee shall meet at each General Assembly. There shall be at least one additional meeting during the period between General Assemblies,
unless the Executive Committee by a postal vote decides otherwise.
$2 \cdot 2$. The Executive Committee shall make nominations to the General Assembly for the Officers of the Union, for the Chairmen and members of the Commissions, and for representatives on Joint Commissions and on other scientific bodies. In each case in which an Officer of the Union is nominated for another office, either by the Executive Committee or by delegates to the General Assembly [By-Law 6.2], the Executive Committee shall also include a nomination for the office which would be vacated if the election to the other office occurs. If the election to the other office does not occur and if the Officer's term has not expired, the nomination to the office which would have been vacated shall not be considered.
$2 \cdot 3$. In the event of the resignation, death or disability of the President, the Vice-President whose term is nearer to completion shall assume the office of President until the close of the next ordinary General Assembly.

In the event of the resignation, death or disability of a Vice-President, the Executive Committee shall appoint one of its members to serve as Vice-President until the close of the next ordinary General Assembly.
In the event of the resignation, death or disability of the General Secretary, the Executive Committee shall appoint a new General Secretary to serve until the close of the next ordinary General Assembly.

In the event of the resignation, death or disability of an ordinary member of the Executive Committee, the Executive Committee shall co-opt a new member to serve until the close of the next ordinary General Assembly.

The accession of an Officer of the Union to a new office under the conditions of this By-Law shall be accompanied by his resignation from the office to which he was previously elected, but service under this By-Law shall not affect his eligibility for immediate re-election to the new office.
$2 \cdot 4$. Any Officer unable to attend a meeting of the Executive Committee may designate a deputy to attend that meeting. Such a deputy shall be named in writing to the President or the General Secretary. He shall have no voting power and shall not be counted as part of a quorum.
$2 \cdot 5$. The President, on his own initiative or at the request of the Executive Committee, may invite any individual to be present at a meeting of the Executive Committee; such an invited guest may take part in the discussions but shall have no voting power.
$2 \cdot 6$. At a meeting of the Executive Committee twothirds (fractional parts neglected) of the Officers specified by Statute $5 \cdot 1$ shall constitute a quorum; and decisions shall be taken by a simple majority of the Officers present and voting. The Chairman of the meeting shall not vote in open ballots; but in the event of an equal division of votes the Chairman may take the final decision. In secret ballots required by the Statutes or By-Laws or ordered by the Chairman he may vote at his discretion. If he does not vote and there is an equal division of votes he may take the final decision. If he has voted in a secret ballot he may not take the final decision, and must leave it to further discussion and ballot.
2.7. During the periods between meetings of the Executive Committee voting may take place by post. Decisions shall be taken by a simple majority of the

Executive Committee, and the rules concerning the voting of the President shall be those specified for the Chairman in By-Law 2•6.
$2 \cdot 8$. Minutes of the meetings of the Executive Committee shall be made. Two copies of the minutes shall be signed by the Chairman and the Secretary of the meeting at which they are approved, and shall be kept by the President and the General Secretary.
2.9. In addition to the obligations described in the Statutes and elsewhere in these By-Laws, the Executive Committee shall
(a) receive and report on the applications for adhesion of new Countries to the Union if the nature of the Adhering Body and the membership of the National Committee have been duly reported to and considered to be in good order by the Executive Committee; pending the next General Assembly the Executive Committee may in the case of such applications provide the Country with such services of the Union as it deems proper;
(b) present an annual report, including an audited statement of receipts and expenditure, to the National Committees;
(c) have the power to appoint representatives on scientific bodies not belonging to the Union.

## 3. President

$3 \cdot 1$. The President of the Union is Chairman of the General Assembly and of the Executive Committee. He is an ex officio member with voting power of all Commissions of the Union.

## 4. General Secretary

4•1. The General Secretary of the Union is Secretary of the General Assembly and of the Executive Committee. He is an ex officio member with voting power of all Commissions of the Union.
$4 \cdot 2$. The General Secretary is responsible for conducting the ordinary business of the Union, including the financial administration, and for keeping its records.

## 5. Commissions of the Union

$5 \cdot 1$. The Chairmen of the Commissions and the chief representatives on Joint Commissions or other bodies shall forward records of all meetings of the Commissions to the President and the General Secretary. They shall report annually on the activities of these bodies to the Executive Committee.
$5 \cdot 2$. If funds are provided for the use of a Commission it may make its own financial arrangements, with the prior approval of the Executive Committee, and subject to the provisions of the Statutes and By-Laws. The general funds of the Union are not normally available for travelling expenses of Chairmen and members of Commissions.
$5 \cdot 3$. No person who has served for three consecutive full terms of office on a Commission is eligible for nomination for a fourth consecutive term of service on the same Commission except as Chairman. In no case is any person eligible for more than four consecutive full terms of
service on the same Commission. These limitations do not apply to Editors [Statute $6 \cdot 1$ ], Co-Editors [Statute $6 \cdot 2$ ] and ex officio members. Any Commission, in its Rules of Procedure, may reduce the length of service specified here.
$5 \cdot 4$. In the event of the resignation, death or disability of the Chairman of any Commission, the Executive Committee shall appoint a member of that Commission to serve as Chairman until the close of the General Assembly following this appointment.

## 6. Nominations and Elections

6.1. All delegates (and alternates) shall be notified of the nominations presented by the Executive Committee under By-Law 2.2 for the Officers of the Union at least ninety-six hours before the scheduled commencement of the session of the General Assembly at which the vote is to be taken.
6.2. Other nominations for Officers of the Union may be made by any six or more delegates. Such nominations shall be made in writing to the General Secretary not less than forty-eight hours before the voting session and shall be accompanied by a written statement that the consent of the nominees has been obtained. These nominations shall be posted by the General Secretary on the official bulletin board not less than thirty-six hours before that session.
6.3. Recommendations from the Commissions for the Chairmen and members of the Commissions shall be made in writing to the General Secretary not less than seventy-two hours before the voting session and shall be accompanied by a written statement that the consent of the persons recommended has been obtained. All delegates (and alternates) shall be notified of the nominations presented by the Executive Committee under ByLaw $2 \cdot 2$ for the Chairmen and members of the Commissions at least forty-eight hours before the voting session.
$6 \cdot 4$. Other nominations for Chairmen and members of Commissions may be made by any six or more delegates. Such nominations shall be made in writing to the General Secretary not less than twenty-four hours before the voting session and shall be accompanied by a written statement that the consent of the nominees has been obtained. These nominations shall be posted by the General Secretary on the official bulletin board not less than twelve hours before that session.
6.5. In voting for the President, Vice-President and General Secretary of the Union, each of these offices shall be taken separately and voting shall be by secret ballot. A simple majority of the votes represented by the delegates present at the voting session shall be required for election. If there is only one candidate for one of these offices, his nomination shall be presented to the General Assembly and the candidate concerned shall be considered as elected. If there are two candidates or more, and an election is not achieved after two ballots, the candidate receiving the smallest number of votes in the second ballot shall be removed from the list. If an election is not achieved after a third ballot, this procedure shall be repeated until an election is achieved. Any ballot form showing more than one mark shall be invalid. Any contingency arising during the balloting shall be resolved by a ruling of the Chairman of the General Assembly.
6.6. The election of the ordinary members of the Executive Committee shall be by secret ballot, the ballot form showing the nominations presented by the Executive Committee and the nominations made by delegates. A simple majority of the votes represented by delegates present at the voting session shall be required for election. If there are not more candidates than vacancies, the nominations shall be presented to the General Assembly and the candidates shall be considered as elected. If there are more candidates than vacancies and all vacancies are not filled by election at the first ballot, a second ballot shall be arranged containing the names of the candidates not elected. If there are vacancies after the second ballot, the balloting procedure shall be repeated until all vacancies are filled; for each of these subsequent ballots the names of the candidate receiving the smallest number of votes on the preceding ballot shall be removed from the list. Any ballot form showing more marks than the appropriate number of vacancies shall be invalid. Any contingency arising during the balloting shall be resolved by a ruling of the Chairman of the General Assembly.
6.7 . In voting for the Chairmen and members of the Commissions each Commission shall be considered separately. For the election of the Chairmen the procedure described in By-Law 6.5 shall be followed. For the election of the members of the Commissions the procedure described in By-Law 6.6 shall be followed except that no more than two ballots shall be held. Any vacancies still remaining may be filled as provided in Statute $7 \cdot 2$.
$6 \cdot 8$. The procedure for the nomination and election of
representatives of the Union on Joint Commissions and on other scientific bodies is so far as is possible the same as that for the nomination and election of the Chairmen and members of the Commissions.

## 7. By-Laws

$7 \cdot 1$. These By-Laws may be amended or suspended at any General Assembly and at least two-thirds of the votes there represented are required for an amendment or suspension. A motion to amend or suspend, if not already included in the agenda of business of the General Assembly, may be made during the Assembly by the Executive Committee or by any six or more delegates. Notification of such a motion must be given by its originators to all delegates and to all Officers of the Union in accordance with the procedure described in By-Law 1•7, and at least forty-eight hours before the session at which the motion is to be considered after it has been placed on the agenda by vote as required by Statute $4 \cdot 9$.
$7 \cdot 2$. Words importing the male sex in the Statutes and By-Laws shall include the female sex.
$7 \cdot 3$. The present English text shall be considered the authoritative text in the interpretation of these By-Laws. Where disputes arise concerning this interpretation, the matter shall be decided by the General Assembly, or, during the periods between General Assemblies, by a ruling of the President of the Union.

## Appendix

| 12 months | Time Table in Preparation for General Assembly | Statute | By-Law |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  | Notice of date and place of ordinary General Assembly to National Committees and Commissions | $4 \cdot 3$ |  |
| 8 months | Notice of date and place of extraordinary General Assembly to National Committees and Commissions, if amendment of Statutes is contemplated | $4 \cdot 4$ |  |
| 6 months | Proposals for amendments to Statutes to General Secretary | $11 \cdot 1$ |  |
| 5 months | Proposals for agenda of General Assembly to General Secretary |  | 1.2 |
| 5 months | Estimated budgets from Commissions to General Secretary | $8 \cdot 2$ |  |
| 4 months | Notice of date and place of extraordinary General Assembly to National Committees and Commissions, if amendment of Statutes is not contemplated | $4 \cdot 4$ |  |
| 4 months | Proposals for amendments to Statutes to National Committees and Commissions | $11 \cdot 1$ |  |
| 14 weeks | Reports of Commissions to General Secretary | $7 \cdot 4$ |  |
| 10 weeks | Report of Executive Committee to National Committees and Commissions | $5 \cdot 6$ |  |
| 10 weeks | Reports of Commissions to National Committees and Commissions | $7 \cdot 4$ |  |
| 10 weeks | Budget to National Committees and Commissions | $8 \cdot 3$ |  |
| 10 weeks | Agenda to National Committees and Commissions | - | $1 \cdot 1$ |
| Time Table during General Assembly |  |  |  |
| 'Before' | Notice by National Committees to General Secretary of names of delegates, alternates and chairmen of delegations | $4 \cdot 6$ |  |
| 96 hours | Nominations by Executive Committee for Officers of Union | - | $6 \cdot 1$ |
| 72 hours | Recommendations by Commissions to General Secretary for Chairmen and members of Commissions | - | $6 \cdot 3$ |
| 48 hours | Notice to General Secretary of nominations by delegates for Officers of Union | - | $6 \cdot 2$ |
| 48 hours | Nominations by Executive Committee for Chairmen and members of Commissions | - | $6 \cdot 3$ |
| 48 hours | Notification of motion to amend or suspend By-Laws | - | $7 \cdot 1$ |
| 36 hours | Posting of nominations by delegates for Officers of Union | - | $6 \cdot 2$ |
| 24 hours | Notice to General Secretary of nominations by delegates for Chairmen and members of Commissions | - | $6 \cdot 4$ |
| 12 hours | Posting of nominations by delegates for Chairmen and members of Commissions | - | $6 \cdot 4$ |

