

# NATURE

No. 3903 SATURDAY, AUGUST 19, 1944 Vol. 154

## CONTENTS

	Page
Machinery for International Administration . . . . .	221
Biochemical Cancer Research. By Dr. F. Dickens . . . . .	223
Higher Education in English-speaking Countries. By T. Rayment . . . . .	225
A Synopsis of India. By Prof. J. H. Hutton, C.I.E. . . . .	226
Physics and Philosophy. By Winston H. F. Barnes . . . . .	226
The Liquid State. By Dr. K. Mendelssohn . . . . .	227
Nutrition and a Matter of Taste. By Dr. Magnus Pyke . . . . .	229
The Imperial College of Tropical Agriculture in War-time. By Prof. C. W. Wardlaw . . . . .	231
Obituary :	
Sir Ralph Fowler, O.B.E., F.R.S. By Prof. E. A. Milne, M.B.E., F.R.S. . . . .	232
News and Views . . . . .	233
Letters to the Editors :	
Synthesis of Amylopectin.—Prof. W. N. Haworth, F.R.S., Dr. S. Peat and E. J. Bourne . . . . .	236
Penicillinase from <i>B. subtilis</i> .—Dr. J. Ungar . . . . .	236
Dextran and Levan Molecules Studied with the Electron Microscope.—Björn Ingelman and Dr. Kai Siegbahn . . . . .	237
A Simple Fluorometer of the Duboscq Type.—Dr. Walter Koch . . . . .	239
Natural Selection in the Six-spot Burnet Moth.—Prof. G. D. Hale Carpenter, M.B.E. . . . .	239
Stability after the War.—Dr. Lewis F. Richardson, F.R.S. . . . .	240
A Halo Phenomenon.—C. J. P. Cave . . . . .	240
Centenary of Dalton's Death.—C. M. Legge and D. E. Wheeler . . . . .	240
Research Items . . . . .	241
Making and Presentation of Scientific Films . . . . .	243
Technical Education in the U.S.S.R. . . . .	244
National Research Council, Canada . . . . .	245
Third Annual Meeting of the Anti-fascist Society of Soviet Scientists. By Victor Krasilnikov . . . . .	246
Earthquakes in Southern California . . . . .	247

*Editorial and Publishing Offices*

MACMILLAN & CO., LTD.,

ST. MARTIN'S STREET, LONDON, W.C.2.

Telephone Number : Whitehall 8831

Telegrams : Phusis Lesquare London

*Advertisements should be addressed to*

T. G. Scott & Son, Ltd., Talbot House, 9 Arundel Street, London, W.C.2  
Telephone : Temple Bar 1942

The annual subscription rate is £4 10 0, payable in advance, inland or abroad.  
All rights reserved. Registered as a Newspaper at the General Post Office

## MACHINERY FOR INTERNATIONAL ADMINISTRATION

ONE of the factors directing fresh attention to the Civil Service at the present time is the realization that much of the success of our plans for dealing with post-war problems will depend upon the way in which the Civil Service carries out its new duties and discharges the much more positive functions which are being demanded of it to-day. That was well brought out in the debate in the House of Commons on employment policy, and in the report of the Assheton Committee on the Training of Civil Servants. The machinery of government must be adapted to its new tasks. Some re-tooling may be necessary, and it is at least certain that a large part of the Civil Service will require training for its new functions.

While the machinery of government is being re-examined in this way, the administrative problems of international organization have received comparatively little attention. The effectiveness of any system of world co-operation which may be established will not depend, however, solely on the readiness of the nations to co-operate, and their willingness to ensure that the world organization has adequate force at its disposal. It will depend also on whether the system is administratively sound, not merely in point of theory, but also from the point of view of the men and women who will be called upon to make it work. If it makes demands on their loyalty and integrity that are impossibly severe, the system is doomed to failure as surely as if, for other reasons, it fails to command adequate support.

A modest little study has been issued this year by the Royal Institute of International Affairs which seeks to fill this gap. Under the title "The International Secretariat of the Future", it considers the lessons drawn from experience by a group of former officials of the League of Nations, and indicates concisely the problems which will have to be faced at the administrative level whatever form we may give to the policy-making organ or organs or to the committees advising them, especially in technical matters, in the world organization of to-morrow. It shows clearly how the formulation and execution of policy on an international scale require a machine which is capable of being rapidly extended for special purposes, and of being reduced again, without weakening the machine as a whole, when the special activity is completed. A central and permanent secretariat provides the necessary continuity and accumulation of experience and knowledge; but the equally necessary power of expansion and contraction depends on the collaboration of Governments.

Discussing the main aspects of the work of an international secretariat and emphasizing that such a secretariat must develop to the full the technique of collecting and using material which is not likely to be generally available, but which, as a servant of many Governments, it has unique opportunities of securing, the question first asked is whether twenty years experience shows that efficient international

action on the service plane is possible. Without claiming perfection for the League's administrative machine, the writers submit it has been decisively proved by experience that an international Civil Service need not be hopelessly handicapped by the lack of a sufficient *esprit de corps*, and that the difficulty of mutual understanding, the clash of traditional systems and the inequalities of administrative experience, need not render the machine inefficient. If there is agreement on policy, an efficient international service can be organized to carry it out.

If an international service is properly instructed either to execute a particular decision or to study a particular question, or if it is performing a recognized routine of work, the fact of its being internationally staffed is no handicap to its complete efficiency. The importance of this conclusion scarcely needs to be stressed. It means that in our planning for world peace we can take it for granted that an efficient international administration can be set up to carry out our plans, provided that in this field, just as in the greater field of policy, we are prepared to create and maintain the necessary conditions.

The discussion of what those conditions are occupies the greater part of this report. Dealing first with the general framework, the statement postulates that the future international organization will be based largely on the concept of sovereign States. The immediate international issue will consequently continue to be how to promote better co-operation among sovereign entities, not how to abolish them. Success in voluntary co-operation may lead States gradually to transfer more aspects of their sovereignty to the international organization than they are at present prepared to do.

Secondly, the practical impossibility of separating the problems of peace and welfare into watertight regional compartments postulates, or at least points to, the need for a world-wide organization. The report admits, indeed, the value of regional organization for certain technical purposes, though no reference is made to such functional regional developments as the Anglo-American Caribbean Commission or the Middle East Supply Centre. It is concerned rather with the danger that crystallization on regional lines may create vested interests and thus obstruct further developments, apart from the more insidious dangers of isolationism and the doctrine of the *Herrenvolk* which regionalism might foster. A world-wide system, starting with the United Nations and expanding rapidly to include neutral countries and ultimately the ex-enemy countries, is regarded as the most probable and hopeful form of post-war international organization.

Thirdly, the report assumes that the international organization will cover political, economic, health, transport, labour and other welfare and technical questions with an international aspect. The writers of the report, from their own experience, fully endorse the argument of M. R. C. Greaves in "The League Committees and World Order", and maintain that unless political and welfare interests mutually reinforce each other even more than did the political and technical activities of the League itself and the International Labour Organisation, each is likely to

fail of its full effect. They do not advocate, however, the immediate creation of a unitary and highly integrated organization complete in all its parts. Effective organizations for security and international justice must indeed be linked to welfare organizations, and it is obviously advantageous and economical to provide common legal, information, translating and other services for the various agencies. Accordingly, individual functional organizations would tend to become linked sooner or later in a general organization, comprising at least a central secretariat and an annual assembly in which all participating States would be represented. Furthermore, since progress in welfare matters can only be secured if peace is assured, the primary and essential duty of an international organization must be to check any tendency towards aggression, and if need be to prevent aggression by force.

The core of this report is to be found, however, in the following two sections which deal more specifically with the international secretariat itself. In regard to loyalty, it stresses the importance of breadth of outlook. The report quotes C. W. Jenks, legal adviser of the International Labour Office: "The international outlook required of the international civil servant is an awareness made instinctive by habit of the needs, emotions, and prejudices of the people of differently-circumstanced countries, as they are felt and expressed by the peoples concerned, accompanied by a capacity for weighing . . . these elements in a judicial manner before reaching any decision to which they are relevant". It is pointed out that experience shows that a spirit of international loyalty among public servants can be maintained in practice and is an essential factor in the activity of an international service.

Representation (in the diplomatic sense) and defence of national interests should not be the function of secretariat officials, and assurance that an official will not be penalized if his duties involve an attitude which is contrary to the policy of his own country on a particular issue is a natural corollary of demanding international loyalty from the service. This point is of particular importance in view of the recommendations in the recent report on the Training of Civil Servants and elsewhere, that selected officers should be seconded for duties with international bodies as one means of redressing the neglect of the experience of other countries which has characterized the British Civil Service. Officials seconded to an international service are particularly vulnerable in this respect.

There are other sound observations on this question of national representation. A system which depends upon the co-operation of member States cannot ignore the factor of national prestige and interest. Representation of all the member States is desirable in itself, both for the contacts it establishes and because it assuages the legitimate desires of Governments; but it ceases to be so unless each official can be usefully employed. It is an important principle that everybody in the service should have constructive work to do, and this principle must be served even if time is required before the expansion of the service

permits full representation on this basis. Beyond this the career must be made as attractive as possible for able persons, and the usual Civil Service principles of permanence, promotion for merit and pension on retirement must be adopted. Similarly, in interchange of personnel between the international and national services, seconding should favourably affect the individual's career in his own service and involve no diminution of his accumulated rights.

The application of these principles, however, must stop short of the highest posts. It should not be made impossible for an exceptionally qualified member of the service to reach these posts, but fresh recruits and interchange of nationals are here of overriding importance. Appointments to the highest posts should be for a limited period, such as seven years, and renewable only in exceptional cases. These responsible posts will be few in number and will command a high premium. A number of them would be reserved in practice for certain nationalities, but while political considerations cannot be entirely disregarded in making such appointments as the head of the service and his deputy, their effect, if possible, should be limited to the enforcement of a wise compromise between the reasons militating in favour of appointing nationals of major or of smaller powers, respectively, to these and other posts in the higher directorate. Apart from other qualifications, moreover, the high officials must be able and willing to work as a team with those above and below them in the service.

It is not easy to define, the report admits, the qualities which the head of the service should possess. He should be young. Political or diplomatic experience, but not necessarily great fame or eminence, is an advantage. Ability for administration in the broadest sense is important, implying a knowledge of when to be dynamic, to take the initiative and to force an issue; when, at the other extreme, to be content as an administrative official; and when, on a middle course, to be a moderate, impartially smoothing over difficulties. These same considerations will apply largely to other members of the high directorate, and in a new organization the only indispensable qualities of the director may well be common sense, courage, integrity and tact.

The central and essential point is that the head of the service and his staff must win the confidence of the member States, and of the policy-making organs which they may set up. In winning this confidence, the abilities and personal qualities of the officials may be as important as the existence of a proper framework within which to operate. As much care must be exercised in selecting the proper people to run the machine as is exercised in creating it; for if able men are not secured, little advance will be effected in world welfare and security however carefully the machinery be planned.

Among the ancillary problems considered in this report is the work of an information section and relations with the Press; and more detailed suggestions for a secretariat information section are included in an appendix. Understanding and support by world

public opinion are as essential to the success of an international organization as the co-operation of member Governments. This is true for technical as well as for political questions, and effective publicity is a vital function of the international secretariat, which can do much to establish the atmosphere in which effective international action is possible. This, as Mr. Greves notes, was one of the most valuable functions of the technical committees of the League of Nations. Similarly, good administration helps to create the internal atmosphere which is conducive to the loyalty of international officials; it will attract able persons to service in the secretariat, ensure the maintenance of good working relations with the national civil services, and reduce considerably the difficulties of collecting members' contribution quotas.

The Royal Institute of International Affairs has done a real service in publishing this study. Attention is directed to some of the problems which need examination and to some preparatory steps which may have to be taken before any new international organization is established. Some of these problems are intimately related to proposals for the reform of national Civil Services, as in Britain. Above all, the report gives a clear and affirmative answer as to the possibility of an efficient international secretariat if the right conditions are created and maintained, and it points equally emphatically to the way in which the effectiveness of international organization depends not only on the quality of the machinery but also on the will to use it. Success can be attained only if individual men and women exercise, through constitutional processes, ungrudgingly and resolutely, their will to use and support the organization and instruments of world order.

---

## BIOCHEMICAL CANCER RESEARCH

The Biochemistry of Malignant Tumors

By Dr. Kurt Stern and Dr. Robert Willheim. Pp. xiv+951. (London: Macmillan & Co., Ltd., 1943.) 60s. net.

**M**AINLY because of the practical urgency of arriving at a fuller understanding of one of the most insidious diseases, but also because of the theoretical interest of a problem so closely related to the mysteries of animal growth, cancer research has for many years ceased to be the exclusive concern of the clinician and the morphological pathologist. The methods of biochemistry and experimental biology, in the widest sense of these terms, have been increasingly applied, and these sciences may reasonably claim a large share in some of the most hopeful advances of knowledge which have resulted. At present the major contributions appear to be the chemical carcinogens, the chemistry of tumour growth, the filterable agents of certain fowl and rabbit tumours, and the transmission of mammary cancer in mice by the milk-borne cancer agent: all these owe much to the application of biochemistry. More nebulous at present, but offering glittering prizes for the future, are the similar developments in the immunology and laboratory diagnosis of cancer.