were made at the hospital whereas by 1944 this number had increased to 5,000.

When a patient attends the hospital in connection with some eye trouble he is examined not only by an oculist, but in case of necessity by doctors specializing in therapy, neuro-pathology, skin and venereal diseases, stomatology, pediatry, etc. The hospital has every kind of laboratory and X-ray department attached to it.

Treatment at the hospital and in the out-patients' department, as well as all necessary analyses are free for every citizen. Operations are also carried out without charge. An average of 250 operations a month are performed at the hospital.

The Moscow Eye Hospital is not only a medical institution, it is also an important clinic. It maintains close contact with the Academy of Sciences of the U.S.S.R., the Academy of Medical Sciences, and related medical institutes (in particular the Institute of the Brain, the Institute of Neurology and others); it holds periodic and regular scientific conferences for exchanges of experience designed to help ophthalmologists. The hospital has trained 2,000 ophthalmologists,

The activities of the Moscow Eye Hospital extend beyond the borders of Moscow. Through its methodological department it renders regular assistance and consultation in difficult cases to doctors working outside Moscow.

The hospital's regular consultant is Professor Strakhov who has been working at the hospital for about 50 years. Such distinguished ophthalmologists as Filatov, Golovin, Odinstov, and others, have also worked in the hospital.

During the war the Moscow Eye Hospital treated thousands of sick and wounded soldiers and performed more than 10,000 operations. Eighty-two per cent. of the wounded and 88 per cent. of the sick were returned to the ranks for further service.

At present the Moscow Eye Hospital is preparing to mark its 120th anniversary.

ANNOTATIONS

A National Eye Service

At the time of writing the National Health Service Bill is rapidly going through its Parliamentary stages, and, for better or for worse, great and far reaching changes are taking shape in the practice of medicine in this country. In these changes ophthalmology will share, and it is essential that all ophthalmologists—particularly those of the younger generation—should carefully consider their implications. Most thinking people are agreed that the medical services in

this country are by no means perfect and that in large areas adequate facilities, especially in the specialist services, are not as readily available to the ordinary people as could be wished. Politically all parties in Parliament are committed to their provision as a national charge; but whether the present Bill provides the best mechanism for their distribution is a matter which some will question. Certainly the proposals are revolutionary and drastic; no one can complain that courage has been lacking in their formulation. Whatever our individual ideas regarding them may be, medicine—and ophthalmology—is entering upon a new epoch.

At the present moment the Bill has passed its second reading in the Commons, and it may therefore be assumed that the general principles it contains will become law. Amendments will doubtless be made in its further course, and much of the detail requires to be filled in by regulations; but we now have before us the main trend of policy which, in due course, it will be open to each member of the profession to implement or reject. At a later stage, when further details have emerged, we will return to the subjects in these pages.

Under the provisions of the Bill ophthalmology is (rightly) included in the Hospital and Specialist Services and it is to be conducted ultimately in special ophthalmic departments and clinics forming part of these services. The whole practice of ophthalmology is therefore to be institutionalized so far as the National Service is concerned. All the hospitals in the country, voluntary and municipal, become the property of the Minister, and apart from the teaching hospitals for which independent and special provision is made through Boards of Governors, their administration is to be entrusted to some 16 or 20 Regional Hospital Boards composed of persons chosen by the Minister (after consultation with the regional medical school, medical representatives, local authorities and those with experience of voluntary hospital management) for their individual suitability for the task. These bodies under the Minister will hold the key positions in the medicine of the future. The country is thus to be regionalized, each region being associated with a university medical school, and the Regional Boards, with the help of Local Hospital Management Committees appointed by them for the day-to-day administration of individual large hospitals or related groups of hospitals, will be responsible for the administration of a co-ordinated hospital and specialist service for the various regions. For their general finance they will look to the Exchequer.

Ophthalmologists participating in the National Service will therefore be appointed by and in the employment of the Regional Boards (or the Boards of Governors of Teaching Hospitals): they may be whole-time on the staffs of hospitals or part-time continuing any private practice outside the service as may be available. If—and only if—they are part-time, they will be able to avail themselves of

pay-bed accommodation in hospitals for private patients, provided the Minister decides that such beds are not required for the general service and provided the fees charged are within a maximum to be fixed by him. In so far as the National Service is concerned he will see and treat patients referred for ophthalmic consultation by practitioners in the same way as in other specialties.

The widespread calls for routine sight-testing and the provision of spectacles, however, necessitate more elaborate arrangements, and for this purpose it is proposed to set up ophthalmic clinics in the hospitals and in association with them. These will be staffed by an ophthalmic specialist in charge, junior ophthalmologists under him (in the larger clinics), and, also under him, optician-refractionists who will do the bulk of the refraction work. There is also provision for orthoptists. Spectacles will be obtainable either at the clinics themselves or at the premises of dispensing opticians taking part in the service. The whole of this service is "free," although if spectacles have to be prematurely repaired or replaced as a result of carelessness, and if the patient chooses to be supplied with more expensive articles than those normally supplied, he will be expected to meet the additional cost involved.

It is the belief of the Ministry that the resources at present available, particularly in clinic accommodation, will not allow of the universal application of such a service when the scheme is inaugurated on January 1, 1948, and to tide over the interval a Supplementary Eye Service is to be inaugurated which essentially continues the working of the National Health Insurance benefit as it is to-day. After a patient gets a recommendation for an eye examination from his practitioner, he may go either to an ophthalmologist or a sight-testing optician of his choice. The difference from the present system is that sight-testing by either of these and the supply of spectacles are "free." These arrangements are under the control of Executive Councils (the bodies which control the general practitioner services of the area) who will entrust the arrangements to specially formed Ophthalmic Services Committees. The ophthalmologist in this Supplementary Eye Service will be employed by and under the disciplinary control of these bodies, as are general practitioners, dentists, opticians, chemists and others, and the remuneration of those participating will be the subject of negotiations. When the Bill becomes law it is the intention of the Minister to undertake an ophthalmological survey of the country, and as soon as he is satisfied that adequate clinic services are available in any area, he may wind up the Supplementary Service in that area. Thereupon all patients desiring eye examination through the National Service will go to clinics only and the ophthalmologist will require to obtain employment through the Regional Boards in the Hospital and Specialist Service.

It is obvious that the widespread (and perhaps ultimately the universal) application of such a scheme will radically alter the habits of all ophthalmologists who take part in it. From the professional point of view the greatest change is our new relationship with opticians. It is certainly true that in the past our relationships as a body with sight-testing opticians have not been the most cordial; but there is every reason to expect that, when each body dove-tails into a co-ordinated place wherein each plays an agreed and appropriate role, the animosities of the past will disappear and give place to co-operation in the future. There are manifestly insufficient ophthalmologists to undertake the total refraction work which a universally "free" service will entail; nor indeed would it be economic that ten years of training (the time which will probably be demanded for the total training of a specialist) should be required for the routine measurement of the optical state of all eyes, a great proportion of which will be "normal." So long as the optical examinations are under adequate medical control, all our requirements should be met, and in this respect this country will provide a more adequate optical service than any other. There is, of course, no reason why the ophthalmologist in charge of the clinic should not himself undertake what refractions he chooses; for the junior particularly this will be a necessity. Moreover, there is no doubt that the running of such a service covering the whole community will keep the available ophthalmologists sufficiently busy.

The present reaction of the individual ophthalmologist to the scheme will certainly vary; and it will doubtless vary still more as succeeding regulations clarify the position with the passage of time. Economic considerations must be postponed until negotiations take place between the Minister and the profession as a whole; but on general principles some may be attracted by the security of a regular pay-packet followed by a pension, even although it may be alterable by any Government of the day, while others may prefer the adventure and opportunities of free practice. From the professional point of view everyone will probably agree with the regionalization and organization of specialist services; some may find relief in the regularized routine and regimentation which even the mildest state service must entail; others may temperamentally abhor its restrictions; and those who have lived for long in the atmosphere of a voluntary hospital will, in many cases at any rate, be regretful. Those who wish to make the best of both worlds may have some anxiety regarding the vast powers vested in the Minister (whoever he may happen for political reasons to be), and fear that his complete over-riding control of the hospitals—without which consulting practice is impossible—puts specialists and consultants too much in his power. The fear may be accentuated by the authoritative statement in the House of Commons that it was the

policy of the Labour Party to have a full-time state salaried service "when the fruit was ripe." From the point of view of the people —and that in the end is the important matter—much will depend on the spirit with which the service is worked both by the Government and the profession. There may be a loss in local interest and voluntary effort or even in some cases of personal intimacy and interest. There may be a gain in the technical machinery and financial resources available to medicine—if Treasury control is kind and the Government is inclined (or indeed is able) to implement its growing obligations indefinitely. But in the end the most important factor will be the type of doctor who enters the Service. The present generation will, if they accept it, see it through creditably. But as for the future, only if medicine, in competition with other professions which are as yet free from State control, can continue to attract brilliant young men and reward them sufficiently, and only if they have opportunity for initiative and the full expression of their personalities, will medicine in this country be able to keep up the traditions of the past and the new medical service bring ultimate benefit to the people.

Myopia in Lower Animals

Some of our readers may remember a leading article in *The Times* newspaper at the beginning of this year entitled "Spectacles on nose," and some letters to the Editor on this subject published in subsequent issues. An Exeter rector wrote to point out that in an inventory of the effects of Bishop Walter de Stapledon, at so early a date as 1326 A.D., is noted a pair of spectacles valued at 2/. Such a sum in those days would probably approximate the cost of the best tortoiseshell frames fitted with toric lenses at the present time. In a later part of his letter he quoted a report from *The Manchester Sporting Chronicle* of January, 1888, of a myopic horse having been fitted with concave glasses No. 7, with remarkable results as to its behaviour.

It would be interesting to know whether our Manchester correspondent is able to throw any light on this case of myopia in a horse. To the best of our recollection the refraction of a number of the lower animals was investigated by William Lang and Sir James Barrett in the eighties of last century and their conclusions published in the Moorfields' Reports. The prevailing optical condition found was hypermetropia, We see no reason why a horse should not be myopic, but we never were asked to give an opinion on such an animal.

Many of the lower animals rely quite as much on the sense of smell as on that of sight. The Manchester animal lost all sense

of timidity when being driven with its glasses attached according to this report, but we should have thought that blinkers would have acted just as well, and most horses when we were young were always driven in blinkers.

Charles Kingsley, in *The Water Babies*, asserted that all dragon flies are very short sighted; but as the eye of the dragon fly, we believe, is a compound optical instrument like that of the blue bottle and common house fly, we must assume that he was writing with his tongue in his cheek, as indeed is apparent throughout much of that fairy tale. A dragon fly in spectacles would be a very odd sight to meet during a country walk. One's veracity might well be questioned had one the temerity to say that one had seen such a sight.

ABSTRACTS

MISCELLANEOUS

(1) **Garden, R. Ramsay (Bristol).—The blind child.** *The Practitioner*, p. 180, September, 1945.

(1) In spite of the steady decrease in the number of those whose blindness dates from infancy there is still a considerable group whose sight is so seriously impaired by congenital, developmental and other defects arising during childhood that they have to be educated and taught the art of living by special methods. The object of this article is to give those not familiar with the care of the blind child some information with which they can encourage the distressed parents and to indicate the voluntary and official organizations which deal with the care and education of these unfortunate children.

The first national school for the blind was founded in Paris in 1784 by Haüy. In 1791 Liverpool opened the first institution of the kind in this country, followed soon after by Bristol, Edinburgh and London (at Southwark). Haüy was the first to emboss paper with raised characters to provide reading matter for the blind, while his pupil Braille published in 1829 the six-point system which bears his name.

In Great Britain the majority of schools for the blind are managed by voluntary associations, but the Education Authorities make the fullest use of their organizations, accepting financial responsibility for maintaining most of the pupils. This also applies to higher