The Rôle of Ophthalmology in the State

Ophthalmology appears at first sight to be one of the most specialized of specialities, a narrowly defined area in the vast fields of medical science. Only those who have devoted their lives to its study realise that it is an infinitely complex world in itself, and that its confines are but artificial landmarks which serve only to obscure its relations with the greater world of human life. We who spend most of our time in its practice, correcting innumerable refractions and otherwise treating the manifold disorders to which the eye is subject, are apt to be content with the narrow point of view, and perhaps to regard with undue complaisance our niche in the scheme of things entire. Yet it behoves us, even more than those who are brought into closer contact with the wider interests of life, occasionally to take stock of our position, to climb some Pisgah height, and search as best we can the promised land which lies before us half hidden in the mists. The present time seems a not unfavourable opportunity for a brief survey of what ophthalmology does and of what it might do.

It is unnecessary to dwell upon what ophthalmology is actually doing in the State. It is familiar to all readers of this journal, yet it is perhaps not unfitting to hint that even in this smaller sphere our outlook is unduly limited. Too often our horizon extends little beyond the sclerotic, or at most, the walls of the orbit. This is our jealously guarded preserve, where trespassers will be prosecuted. It is little excuse that we seldom invade our neighbours' territories. Both they and we would be all the better for a freer intercourse.

But there are many still more remote fields which are waiting for ophthalmologists to cultivate. Already in peace time some were being revealed, and the war has added to their number. Perhaps the most comprehensive problem is that which deals with natural and artificial lighting in domestic, public, and industrial activities. This would seem to be par excellence the ophthalmologist's theme, yet it has been left for illuminating engineers to invite ophthalmologists to show their interest in it. Thanks to the Illuminating Engineering Society, much good work has been done, and the lighting of schools and libraries has been carefully considered. Even the Government has been stimulated to enquire into the lighting of factories. All these lighting problems teem with difficulties which can be satisfactorily overcome only with the co-operation of properly equipped ophthalmologists. Here indeed is work for many years.
In various trades there are many other problems for the ophthalmologist to solve or help to solve. There are numerous questions relating to colour—colour matching by artificial light, the best colours for signal lamps, and so on—all of which involve a knowledge of physiological processes and colour vision.

Then, too, there are pathological problems. Some years ago the Royal Society undertook, at the request of the Government, to investigate the cause and possibility of prevention of glass workers' cataract. It is significant that the Royal Society was unable to form a completely representative committee from amongst its Fellows and had to invoke the help of ophthalmic surgeons. These researches extended our knowledge of the physiological and pathological action of heat, light, and ultra-violet rays upon the various structures of the eye, and led directly to the synthetic preparation of glasses of various absorptive properties by Sir William Crookes. Much has been done, but far more remains to be done, and it is for ophthalmologists to play their part.

The war has brought to light many problems which those learned in the physiology and pathology of visual processes can alone solve. Some of these it would not be fitting to discuss in detail—they have to do with searchlights, range-finders, atmospheric conditions of visibility, and similar matters. Nearly all demand a more exhaustive knowledge of physiology and physics than is possessed by the average ophthalmologist. Much may be done in co-operation with physiologists and physicists, but by no means all.

*Verbum sap.*

Many years ago the War Office approached the Ophthalmological Society on the subject of tests of visual acuity for officers of the Army. Since then nothing has been done, with the result that chaos reigns supreme. What is the minimum visual acuity necessary for an airman, an artillery officer, an infantry officer, a private, a munition worker . . . ? Still more pregnant is the question, "What guide does a standard in terms of Snellen's test types bear to the actual requirements of these men in their various duties?" These and innumerable other such questions await an answer which can only be given by expert ophthalmologists, and then only after much travail of body and mind. It is futile for us to wait for the authorities to ask us these questions. Reform can only come if we storm the citadel of inertia. The fault is not wholly ours; it is largely due to the lamentable lack of co-ordination in the medical profession. It is for us to show the way.