that, with the lens of 1927, the left vision was, in 1929, as much as 6/12. Further remark or comment seems unnecessary.

Yours faithfully,

HUMPHREY NEAME.

LONDON,

February, 1930.

GLAUCOMA RESEARCH

To the Editor of THE BRITISH JOURNAL OF OPHTHALMOLOGY.

SIR,—It is not too soon to suggest that a discussion on glaucoma be made a main item on the programme of the next International Congress and that the International Council appoint a sub-committee to deal with the matter, with objects somewhat as follows.

1. To arrange that systematic study of different specific aspects of the subject be taken up in some half-dozen or more of the larger clinical centres and laboratories.

2. To act as a co-ordinating centre, receive interim reports and issue bulletins to the workers, so that results as they are obtained may be available to all who are actively investigating.

3. To receive all final reports, some six months before the date set for the Congress and to co-ordinate them into a general report.

So many practical suggestions, requiring investigation, have been made, that if an adequate system were organized, a large amount of information would be available, possibly even the problems of cause and treatment solved. The mere task of organization will be no light one as so many details need investigating.

What for instance is known of the type of glaucoma in which the nerve-head seems to melt away, although there is practically no uveitis nor hypertension? To me it always recalls a sarcomatous knee-joint which was exhibited at the British Medical Association meeting in 1923 at Portsmouth. This large specimen, some ten inches across, had been bisected and half of it mounted in the usual way. The other half had been submitted to the action of a broth containing *bacillus subtilis* and a *staphylococcus*. It looked as though it had been left out in the field, to the action of beetles, larvae and micro-organisms. The bone had been picked clean, within and without, there was not a vestige of soft tissue left and the various concentric layers of pathological bone stood out stark and naked and this was largely due to a *staphylococcus*. It may seem fanciful to think that there is any connection in the disappearance of tissue in these two instances, but there is reason to think that a *staphylococcus* was active in both. In 1925 I reported a few cases in which a *staphylococcus* was found within the eye-ball

under conditions which seemed to exclude contamination. I did this in the hope of arousing interest in this aspect of the question. Apparently, though, operators still continue to reject material removed from glaucomatous eyes as useless. Since then we have had one comprehensive report on glaucoma, from Moorfields. Unfortunately this report deals almost exclusively with disorganized eyes, while what we need is information as to the prodromal stage, when there is no ordinary sign of disease present, although the impracticable fluoresceine test would probably be positive. The beautiful methods used by Klliker of noting the changes in cellular outline, shown by examination with X-rays and ultra-violet rays do not seem to have been developed and should be fully investigated.

Even if the constant presence of a specific infection in glaucoma be proved, one has to look further for the ultimate cause, as germs, except when very virulent, do not establish themselves in healthy tissue. In London in 1925, Hawley of Chicago reported five cases of glaucoma, cured by correction of intestinal toxmia, which he claimed as the cause of the disease. To some extent the point is well taken, but other sources of toxic absorption cannot be ignored and it must be borne in mind that an insufficient dose of purgative given to a patient with a torpid bowel is a potent cause of toxic absorption and can do great harm instead of good.

Since the publication of Fischer's book on oedema, a number of attempts have been made to reduce tension by saline injections; it is perhaps unfortunate that the kation sodium was chosen for this purpose as it causes retention of fluid in the tissues and any benefit will be but temporary. Calcium and potassium cause removal of fluid from the system and should be more efficacious.

Iodized oil also promotes prompt removal of fluid from the eye and as, in addition, it causes absorption of exudate and dead cells and has a powerful anti-toxic action its effects should be systematically investigated. I have treated a few cases of glaucoma with good results with iodine alone and have never used it in any case of the inflammatory type without great benefit.

There seems to be little doubt but that hypertension is due to swelling of the ciliary body. Whether this is sufficient in all cases to raise tension or whether inflammatory fluid secreted by the ciliary cells, posterior to the suspensory ligament, is retained, owing to insufficiency of the ligament, is also a matter of doubt.

These are but a few of the many points upon which information is required and can be obtained. With adequate organization results are certain, without it fortuitous.

Yours faithfully,

RICHARD KERRY.

MONTREAL,

December 20, 1929.