negative coliform bacilli, growing as *Proteus vulgaris*. On July 8 the residual urine, thick and purulent, was down to only  $6\frac{1}{2}$  oz. (185 ml.), while the deposit from the midstream urine contained a few pus cells and a few streptococci, growing poorly as non-haemolytic streptococci. The patient has not been subsequently seen, and cannot be traced.

As stated, the recess proximal to this extraordinary transverse fold, which is obviously congenital, and whose origin may be left to embryologists, seemed larger than the distal recess; and it appeared as if a collection of urine in the upper pocket might distend the fold downwards and so obstruct the internal urethral meatus. The median division of this fold would, it might be supposed, prevent this by allowing urine to flow freely from the upper to the lower pocket. That this reasoning is correct is suggested by the course of the case, mere median division of the fold being followed by a fall in the residual urine from 60 to  $6\frac{1}{2}$  oz. (1,704 to 185 ml.).

It would be interesting to know if others have met with similar cases.

ALEX. E. ROCHE, M.D., M.Ch., F.R.C.S.

## Blindness in Southern Nigeria

What are the causes of blindness in Southern Nigeria? Does blindness in this part of tropical Africa result mainly from tropical diseases, epidemic or endemic? As there were no reliable answers to these questions and as this subject is of considerable importance, an attempt was made to investigate and to record the immediate and remote causes of all cases of blindness seen at the Lagos Eye Clinic.

Harold Ridley (1945) has described an area in the Gold Coast where a considerable number of the inhabitants are blind from onchocerciasis, which is endemic in that district. No condition comparable to this has as yet been discovered in Nigeria. Trachoma is widespread and entropion from contraction of the lids has been reported to be very common in the Northern Territories of the Gold Coast and Northern Nigeria (Dr. Cave and Dr. Branch, personal communications). It was seen less often in cases from Southern Nigeria.

It has been said that a large proportion of the blindness in Nigeria is due to epidemics of smallpox. Occasionally, in cases of leucoma, the patient has stated that smallpox was the direct cause of the condition, but accurate information about the real number so affected is lacking, and there are no grounds for such a dogmatic statement. Tropical diseases undoubtedly increase the liability to blindness by lowering tissue resistance to infective processes, but it is not possible to assess the effects of malaria, helminthic disease, etc., which are commonly found coincidently with eye disease in Southern Nigeria.

## RESULTS OF INVESTIGATION

The Lagos Eye Clinic deals with 7,000 new cases yearly and 20,000 attendances. From 1946 to 1949, inclusive, all cases of blindness attending the clinic were examined and the records kept. The standard of blindness adopted was visual acuity less than 3/60 Snellen. In a large number of cases it was not possible to do more than make a diagnosis of the condition present at the time of the examination. There were, for example, 29 persons totally blind with staphyloma, leucoma, or phthis bulbi. When these patients were led into the clinic it was apparent that treatment could not improve their condition. In such cases it is not always advisable to ask questions about the origin of the condition. Almost all the cases recorded were from Southern Nigeria, being referred from district hospitals or coming of their own volition.

Total Blindness.—The accompanying Table shows that the commonest causes are cataract, glaucoma, and optic atrophy in that order of frequency. To the figure for cataract might be added the 11 cases blind from the operation for couching. So far as I am aware the fact that couching for cataract is being done in Nigeria has not hitherto been reported. It is probable that as the more orthodox

Table of Blindness

Causes of Blindness			Blind in Both Eyes	Blind in One Eye
Leucoma, phthisi Choroiditis Cataract, senile Cataract, congen Local infections Traumatie Glaucoma Optic atrophy Optic neuritis Myopia	ital .		29 13 115 20 16 0 72 44 1	213 32 223 19 94 129 49 39 0
Avitaminosis Trachoma Iridocyclitis Retinal detachme Orbual tumours Couching Onchocerciasis Interstitial kerati			3 19 2 3 0 11 1 2	0 19 90 9 2 13 1
			356	948

operations are not available this ancient practice is wide-spread. From personal observations it seems that two types of operative procedure are practised: dislocation by a needle or thorn is sometimes employed, or manual dislocation by pressure with the fingers. So far as can be ascertained the native manipulators are all Hausa—that is, natives of Northern Nigeria. Acute glaucoma is rarely seen in Lagos. The cases recorded are all the end-result of the chronic simple type of symptomless glaucoma. It will be noted that a considerable proportion of the blindness could be prevented or cured. This investigation shows definitely that no single disease can be quoted as a main cause of blindness in Southern Nigeria.

Monocular Blindness.—The records of this condition were made for comparison and interest. The total number recorded is 948, and the males and females are about equal. It was also found that right and left eyes were equally affected. The sequence of frequency was cataract; leucoma, phthisis, and staphyloma; trauma; local infection; iridocyclitis; and glaucoma.

From this short report it will be appreciated that much remains to be done before comparison of figures and conditions can be made with those of more civilized countries.

I wish to thank the Director of Medical Services, Nigeria, for permission to publish this paper.

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A short article in La Presse Médicale of February 2 gives news about medicine in Germany to-day. In Western Germany there are 63,000 doctors as compared with 44,000 before the war. Medical students number more than 22,000 in the universities—in proportion to the population this is more than twice the number in the United States. Doctors are paid very little, and less than half the 17,000 in hospitals are receiving a living wage, so it is scarcely surprising that most of them have to take other jobs and are employed as night watchmen, musicians, and so on. This surfeit of doctors is due partly to the large numbers of refugee medical men and partly to the fact that during the war many hundreds of doctors were trained for service in the Forces. Those most affected are the young newly qualified doctors; the specialists are rather better off. Private patients are rare, and the doctors depend upon State payment for their treatment of insured patients; often they earn less than Post Office employees. There is virtually no freedom for the doctor in modern Germany, who is not even permitted to use his car unless the patient is more than two kilometres away from his home. He is not allowed to refuse to treat a patient. War and its aftermath have meant that Germans frequently fall ill, and the doctors, in spite of their great numbers, work twice as hard as they did before the war for about the same sum of money.