glaucoma constitutes one of the most important features of this symposium, and as we have but five minutes each for discussion and as our Chairman has said we need not be confined strictly to the paper read, I shall confine my remarks to the operation.

As to the question "whether to operate in glaucoma simplex," it is a very difficult one to answer. In acute glaucoma we can promise much from operative interference. Iridectomy cures a very large majority, and it is the operation par excellence, but how different it is in the chronic variety. My experience has been that if we do not see our patients for many years before we have operated on them, we usually find that the sight has failed, but fortunately even in these we can in many still preserve some sight by the use of myotics and massage. These patients, however, are usually well-advanced in years, and death often comes to their relief before they are totally blind. How very applicable are the words of Solon to these cases. You recall what he said to King Croesus, who, on showing his treasures to him asked that sage if he did not consider him one of the happiest of men? "Count no man happy until he is dead," was the reply, and so it is in chronic glaucoma. Count no one happy who labors under this terrible disease, until he is dead.

Dr. Learsy Conn, Detroit, Mich.—There are two observations that have occurred to me and which have been of interest in every case of glaucoma of this nature that I have seen. If one eye was affected and the other not, the better eye and the other one too, so far as I could observe, always had a defect of neglected refraction at the time it came under my notice. The second point is that in all of those cases that I have seen there was that indefinite condition—call it rheumatic, gonorrheal, or defective assimilation, whatever you will—of imperfect transformation of food into tissues, and retention in the fluids of the body of an undue amount of abnormal material. For myself, in addition to the local treatment that has been alluded to, I have always corrected as carefully as possible the defective refraction, and in not what I could to have the constitutional condition, and, in so far as I have been able to observe them the results warranted the efforts made in that direction. To my own mind, without being able to demonstrate it, these are two factors in the causation and progress of this sort of trouble, which are tangible and for which something can be done.

Dr. Smith—So much depends on the early diagnosis of these cases that, for the benefit of the patient, something ought to be put down either in the text-books or in our teachings or discussions, to guide us in better diagnostically simple glaucoma at an early period. It has been my experience to be taken to task by brother ophthalmologists with the remark, "Smith is wrong." This is only a case of asthenopia and not glaucoma at all. I have been in the habit of finding an uncorrected error of refraction and, if correcting does not relieve the symptoms and on more careful examination a slight degree of contraction of the field be brought out in a moderate light, I can diagnose simple glaucoma. I have found, in a number of cases, and I am glad to be substantiated by the experience of Dr. deSchweinitz, this contraction of a portion of the field almost as many times as the typical contraction, in fact it has occurred so frequently that I doubted my own diagnosis because I did not find the so-called nasal contraction. I have found it difficult to diagnose with the ophthalmoscope, the delicate saucer-shaped cupping, and it does relieve the constitutional condition, to the very edge at first in this disease; very frequently there is a shallow cupping that does not reach to the edge of the optic nerve.

We often find that the tension varies, and I have found that in many of these cases it varied at different periods of the day. I have had patients examined in the morning, and I doubted the presence of any tension, and in the afternoon, on examining them again, I found a tension of +1 without any doubt.

For treatment I like deWecker's sclerotomy. For years I did a double sclerotomy, but when deWecker gave us his method I accepted it and have followed it with excellent results. I propose to try it, and for we can repeat it two or three times if we wish, and still resort to iridectomy later. Most of my cases, particularly women, object to the deformity made by iridectomy. In the large majority of my cases I have had very satisfactory results.

Dr. F. B. Tiffany, Kansas City, Mo.—Since hypermetropia has received so much attention and has been so widely corrected during the last few years we will have acute glaucoma so frequently as before. When I first began the practice of ophthalmology, over twenty years ago, I often had cases of acute glaucoma; now I very rarely have them, and I believe the reason is that hypermetropia was responsible for this disease to a very large extent.

The treatment that has given me the most satisfaction in chronic glaucoma is the use of dry heat. I use electric heat, applying it uniformly by means of the rheostat. I also administer suprarenal capsule, exsanguinating the eyeball and treat locally with eisin or pilocarpin. I can, as a rule, stop the pain, check the disease and oftentimes restore some vision.

WHY THE NEGRO DOES NOT SUFFER FROM TRACHOMA.*

BY WARWICK M. COWGILL, Ph.B., M.D.

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PADUCAH, KY.

It is a coincident observation among oculists practicing in our southern states, where the larger portion of our negro population lives, and where trachoma is a very prevalent disease, that the negro, except very rarely, is not affected with trachoma. Why the negro does not have it has been largely theorized on. Probably the explanation most largely entertained is that he is immune to this disease, that the conjunctiva of the negro does not present a soil suitable for the development of trachoma. To my mind this theory is untenable. The reasoning is loose and not based on facts to guarantee a correct conclusion. There is a rational, plain, scientific and simple explanation for the fact that negroes do not suffer from this disease, an explanation that does not call for some unique quality of construction in the negro; an explanation based on a line of reasoning, concurrent with that used in the development of facts in connection with other diseases, viz.: trachoma is a contagious disease, and the negro escapes it because he does not come in contact with the contagion.

The question as to whether trachoma is a contagious disease or not is one that, I know, is in dispute. Either side can boast of able supporters. Several have announced to the world, that they have discovered the germ of trachoma, but none have presented such conclusive proofs that their findings have been accepted by the profession. From my clinical experience I believe that it is contagious in the same way as gonorrhoea and syphilis are contagious, and I will assume, for the sake of my argument, that such is the fact, and on this base my reasoning in support of my second proposition, that the negro does not have trachoma because he does not come in contact with the contagion.

I draw my conclusion from the study of this disease as it occurs among the people of western Kentucky, southern Illinois and a portion of western Tennessee, from which sections my patients usually come. Paducah, a place of 25,000 inhabitants, is the only city, and the center of this district. The remaining portion, including the smaller towns, hamlets and villages, I include with the rural districts.

In Paducah, with a negro population of probably one-fifth, trachoma is not often seen. In the surrounding country, where the negro population is one in eight

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or one in ten, trachoma is very prevalent. In fifteen years of practice I have seen no case occurring in a negro. Nor do I find this disease among the well-to-do class of whites. But it is extremely common among the poorer class of whites in the country districts.

With these facts before us, if we look into the social relations and customs of the people, I think we can see a solution to our problem. It is a well-known fact that the negro is in our southern states comes in contact with only the upper and well-to-do class of whites, in the position of servants. And as trachoma is but rarely seen among the upper class of whites, the negro has but little chance to come in contact with the germ from this source.

Diagram.—The line ABC represents the whites; the line AB, well-to-do class of whites, among whom there is but little trachoma; the line BC, poorer class of whites, among whom trachoma is very prevalent; the line XYZ represents negroes. From X to Y the line runs parallel with the line AB, representing the approach of the negro to the well-to-do class of whites, but there is no immediate contact. The line Y to Z shows the constant divergence of the negro and the poorer class of whites, between whom there is absolutely no contact.

It is also a well-known fact that between the negro and the poorer class of whites there is a wide gulf fixed. They do not come in immediate contact with each other at all. This fact bars the negro from contracting the disease from this most prolific source. With the lower class of whites there is a custom of having one towel, which is used in common by all the members of the family, and also by the neighbors that visit them. The one towel used in common is the medium of conveyance of the trachoma germ from one to the other.

Burnett, in his article on trachoma, in the "System of Diseases of the Eye," by Norris & Oliver, mentions the fact that among the laborers on a railroad in east Tennessee, where Irish and negroes worked under the same hygienic surroundings, the Irish were much afflicted with trachoma, while the negroes were entirely free from this disease. I venture to assert that there was no immediate contact, in this instance, between the Irish and the negroes. I feel safe in saying that the negroes did not use the Irishman's towel.

Statistics would show that but an extremely small percentage of virtuous maidens have gonorrhea, because they do not come in contact with the contagion of this disease. The people of Ohio do not suffer from yellow fever. Not because they are immune to this disease, for the cases in Gallipolis, in 1878, proved the contrary, but simply because they do not come in contact with the germ of yellow fever. The Hawaiians did not have syphilis until it was introduced among them by immediate contact with foreigners. I think the same line of reasoning holds good in regard to the negro and trachoma.

In order to transmit trachoma from one eye to another, the secretions from the diseased eye must be conveyed directly, while viable, to the unaffected eye. This conveyance could not be carried out more perfectly, when done in an unintentional way, than by the use of one towel in common by those who are affected with trachoma and those that are not so affected. We find, where trachoma is prevalent, the use of a towel in common is the prevailing practice.

The negro in this country, as a slave, or now as a freedman, has never in the past, nor does he now, come in immediate contact with the whites. Therefore the negro has not contracted from the whites this disease, trachoma, which can only be transmitted through immediate contact.

415 Broadway.

CONVERGENT STRABISMUS.

A CASE, OBSERVED IN THE CLINIC OF DR. LANDOLT, MEASURING 62°, AND ITS MANAGEMENT.*

BY WILLIAM B. MEANY, M.D.

LOUISVILLE, KY.

I desire to report an interesting case having a total apparent strabismus—convergent—of 62°; with a view to demonstrating a method for this individual case by Professor Landolt, of Paris. From my clinical notes, taken at the time (1886), I present the following: A young man, 19 years of age, applied for treatment, "for loss of vision in the right eye." Ophthalmoscopic examination revealed:

Right and left eyes, hyperopia total, 3.5 D.

Right eye, convergent strabismus apparent, 52°.

Angle K (angle between the lens of fixation and the radius of the cornea, which passes through the pupil) +10°.

Therefore we have a case with a total convergent strabismus of 52°+10°=62°, an exceptionally high degree. The field of fixation, measured with Landolt's perimeter, was:

<table>
<thead>
<tr>
<th>Left Eye</th>
<th>Right Eye</th>
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<tbody>
<tr>
<td>Ext. 32</td>
<td>Int. 47</td>
</tr>
<tr>
<td>Ext. 47</td>
<td>Int. 34</td>
</tr>
</tbody>
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Instead of Normal,

| Ext. 47  | Int. 47   |

It will readily be observed that the field of fixation is strongly limited to the outer side of both eyes. Binocular vision abolished, it was found impossible to provoke the union of the two stereoscopic images, or even the simultaneous vision of such with the stereoscope.

For prudential reasons, chloroform was administered, and a tenotomy of the internal and advancement of the external recti muscles was practiced in the right eye. The internal rectus muscle was found to be enlarged and exceedingly strong; the external rectus, very weak, narrowed and flattened—ribbon-like. A slight resection of the tendon was made. Atropin having been instilled,