inorganic reagents, but that it also yields a coagulate much less readily when mixed with a number of physiological liquids. The investigation of this subject and its consequences is being continued.

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MEMORY SIGHT.

BY

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THERE is a widespread impression, not only amongst the laity but also in the ranks of the medical profession, that the blind—by which I mean the totally blind—live in perpetual, black darkness. This I believe to be an error in observation, for inquiries have elicited from my blind patients the information that, on the contrary, they habitually see “a bright background.” They describe this variously, but the terms “like a bright cloud,” or “like a luminous haze,” seem to convey the prevailing impression, whilst remarks as to “a play of colours” before the eyes are also met with from intelligent people. A patient of Dr. de Schweinitz, though totally blind, declared that “all things seemed to be a sea of red fire.” I cannot but think that this “outlook” powerfully modifies the mental qualities of the blind, and helps materially to give them that cheerfulness which is so strikingly their class characteristic. It would be difficult to believe that anyone who was surrounded by thick darkness could by any possibility be mentally cheerful.

There is another feature of “the sight of the blind” which is little known, and of which they seldom care to speak unless directly questioned, probably owing to the fear that it may excite scepticism or ridicule. On this point I venture to quote from my book on glaucoma (*A Treatise on Glaucoma*, second edition, p. 105):

“Even more striking is the fact that patients are to be found who will protest that there are occasions on which they can sit by a window, look out, and see all the features of a scene with which they were familiar in days gone by; and yet on examination the eyes are absolutely blind. To this condition the term ‘memory sight’ may be applied, for the pictures are but the aftermath of visual impressions stored in the cerebral cortex in a happier past. Such is the power of reflection and of recollection that the patient’s mind is enabled to summon these shadows of earlier impressions and to invest them with all the semblance of a reality. It is indeed a pitiable delusion, born of memory and imagination, of hope and despair.”

I have quite recently seen an elderly patient, long blind in one eye from glaucoma, who had lost all vision in the second eye from the same disease, and who had to have this eye removed on account of constant pain; her one great fear was lest the removal of the eye might rob her of the subjective sensations of light, from which she derived so much comfort. The enucleation of the eye made no difference whatever to these. She could still see the bright field of light, just as before, and she described in glowing terms how she could summon up to her consolation the “actual vision” of many objects around her. Her own words are of interest: “I can make myself see the things and people around me; I can even see every stitch of the knitting which I hold in my hand, just as I did in the days when I had my sight.” More recently I have seen a man over 70 years of age who had lost one eye as the result of an accident in his youth; he developed a malignant growth of the second eye, and this too was removed after a consultation in which all concerned were unanimous as to the right course to pursue. He describes his visual sensations thus: “I see a sort of white mist tinged by light from above; this appears to come from behind me.” He also sees pieces of furniture—such as a grand piano of dark wood, or a writing-table, or other articles of furniture—which are apparently so real and vivid that he tries to avoid walking against them. Be it remembered that he has no eyes whatever.

We are all of us aware that, with our eyes closed, in the dark, during sleep, we can see people and things most vividly in our dreams; but it might be argued that this is not very strange, since we still possess actively sentient ocular globes. It is of interest to learn from these cases,

not only that blind eyes may see during waking hours the images of objects perceived in bygone days, but that the complete removal of the globes is no bar to the memory sight, which brings so much comfort to the blind. Clearly we have here to do with memories stored in the brain, presumably in its cortex, as the result of earlier experience. In this connexion it is interesting to remember that a man does not see with his eyes, but with his brain; the eyes are but a complex mechanism, optical and neuro-electric, whereby external stimuli are conveyed to the cerebral cortex, there to give rise to visual sensations. This explains many things which are otherwise difficult to understand—as, for instance, the way in which a trained observer, with relatively less visual acuity, as tested by types, etc., will pick up and recognize distant objects with an accuracy and a speed which the ordinary man, untrained in the same direction, cannot emulate.

BUTYN AS A LOCAL ANAESTHETIC:

A WARNING.

BY

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THERE have been several communications in the *JOURNAL* recently on this subject, and the question of cocaine substitutes has been well summarized in the article by E. Watson-Williams, in the issue of December 1st, 1923. Having special opportunities for testing any cocaine substitute in intralaryngeal surgery, I accepted the invitation of the Ministry of Health to give butyn a trial. The following were the results in four cases:

CASE I.—A man, aged 34, with tubercle of lungs and larynx, was sprayed and painted with a 5 per cent. solution of butyn. The patient was only able to tolerate touching the epiglottis. Repeated swabbing of the interarytenoid region failed to benumb this important area even at the end of twenty minutes; yet it was quickly anaesthetized with a 10 per cent. solution of cocaine, and the galvano-cautery was easily used on the vocal cords. There was profuse secretion of mucus.

CASE II.—A woman, aged 38, with tubercle of lungs and larynx. Half an hour was spent attempting to anaesthetize the larynx with a 5 per cent. solution of butyn; in this object it entirely failed, but it produced much secretion of mucus. I was therefore obliged to have recourse to cocaine in a 10 per cent. solution, which had been used on the patient on several previous occasions, and quite successfully.

CASE III.—A man, aged 36, with tubercle of lungs and larynx, was a very tolerant patient who had had many cautery treatments to the larynx under cocaine. The butyn was effective as an anaesthetic, but it took longer to act and was less complete than cocaine. The patient remarked that his throat was less “numb” than usual. The profuse secretion of mucus was very inconvenient.

CASE IV.—A man, aged 31, with tubercle of lungs and larynx, was extremely tolerant. Complete anaesthesia was obtained, although the free secretion of mucus was troublesome. All pharyngeal and laryngeal reflexes were abolished and it was easy to make a satisfactory application of the galvano-cautery to each vocal cord. This application had just been completed and I was congratulating the patient on his behaviour, when, without any warning, he half rose from his chair in a condition of tonic convulsion and would then have fallen forward on the top of me if I had not seized his body and laid him flat on the floor. Here he passed through the typical phases of an epileptic convulsion—unconsciousness, congested face, foaming at the mouth, clonic spasms, dilated pupils, and large bounding pulse. At the end of two to four minutes he gradually recovered consciousness, but remained in a dazed condition for some time. He had no recollection of what had happened. Inquiry showed that he had never been subject to fainting or fits, and there was no history of epilepsy in his family. A month later his larynx was anaesthetized with a 10 per cent. solution of cocaine and then treated with the galvano-cautery, without any suspicion of faintness, convulsion, or other untoward incident.

During the last twenty years, though making free local use of cocaine, I have had no anxiety in a single case.

This alarming incident with butyn will certainly prevent me from employing it again. Compared with cocaine in laryngeal work it is slower in action, very much less effective, produces an irritating amount of secretion, and can evidently be extremely toxic.

Whatever its use may be in the eye, ear, nose, or pharynx, I can see nothing but disadvantages and dangers in using it in laryngeal work.

I should add that a few drops of adrenaline were employed with the solution of butyn and that a sterile solution was freshly prepared, according to directions.