tures of exit connected with an extraction-shaft. The chief feature, however, of this Belgian enterprise, is the introduction of ozone within the house, for purifying the internal air. A fall of the Inn supplies sufficient motor force for this purpose, and for electric lighting. Those who passed this end of the Upper Engadine fourteen or fifteen months ago would now be surprised to see the change brought about in this deserted but picturesque corner of the valley: ornamental chalets are springing up, a park is being laid out, gardens prepared, and hundreds of workmen engaged in the completion of the Kursaal.

An accidental discovery has been made of a chalybeate water having a large amount of free carbonic acid. It would appear, from the analysis of Professor Reichardt of Jena, that the Paracelsus spring of St. Moritz, has been tapped in the Maloja, which latter place is eleven miles distant, and at a higher level. As the land all belongs to one proprietor, the danger—common in Switzerland—of irregular building and a loose regard to sanitary matters will be avoided.

From observations of the Maloja, I am inclined to think the temperature is a little higher than at Davos; but, up to the present, winter has been too irregular to permit a decided opinion on this point.

SHOT-SILK RETINA.

By ARTHUR H. BENSON, F.R.C.S.I.,

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IN the BRITISH MEDICAL JOURNAL of January 12th, 1884, appeared a paper on the above subject, read by Mr. Spencer Watson before the Section of Ophthalmology of the British Medical Association. In it, Mr. Watson accurately, and, as he seems to think, for the first time, describes the well known appearances of opalescent or "shot-silk" retina. "In these notes," he says, "I shall endeavour to give a definiteness to a vague and (as I believe) hitherto undescribed appearance." He then quotes five cases in detail, and thinks that, in all, he has seen perhaps a dozen such!

Had Mr. Watson consulted Nettleship's *Student's Guide to Diseases of the Eye*, 1879, pp. 168-9, he could have read that "in children, especially those of dark complexion, a peculiar and striking whitish shifting refraction, or shimmer, is often seen at the yellow-spot region and along the course of the principal vessels. It changes with every movement of the mirror, and reminds one of the shifting refraction from 'watered' and 'shot' silk. Around the yellow spot, it takes the form of a ring or zone, and is known as the 'halo round the macula.'"

In 1881, I was for some time engaged examining, for statistical purposes, the eyes of deaf-mutes in some of the asylums about Dublin, and was struck by the frequency of this appearance, often occurring in perfectly healthy eyes, with normal vision and emmetropic refraction.

Latterly, I have been testing the refraction, etc., of numbers of school-children. This day I examined ophthalmoscopically forty-two boys belonging to Artane Industrial School. They were taken by divisions, and in no way selected. The following is an analysis bearing on the point in question. Of the forty-two boys, ranging in age from nine to eighteen years, twenty-nine (or 69 per cent.) exhibited the shot-silk retina to a greater or less degree; fourteen were very well marked cases. Of the twenty-nine, twenty-one had vision of $\frac{1}{2}$, and eighteen were emmetropic, ten of these showing the appearance well marked. Hypermetropia occurred in six cases, hypermetropic astigmatism in three, mixed astigmatism in one, and myopic astigmatism in one. In this latter case, the "shot-silk" appearance was especially marked.

Dr. Keane, who was examining simultaneously other classes of the same school, noted shot-silk retina in about the same proportion.

From the above analysis, it appears that what Mr. Watson deemed rare is, in fact, most common; that what he thought only occurred in hypermetropia, occurs in emmetropia and myopia; that what he thought was an indication of defective sight, is commonly found associated with normal vision; and, finally, that what he thought to be an "undescribed condition," turns out to be one fully described in Nettleship's treatise.

It seems unnecessary to discuss further Mr. Watson's paper; "shot-silk" retina is a condition well known to all ophthalmologists, and so common that one has only to examine half a dozen healthy children to find a case or two. That it is observed most frequently in hypermetropia, one need not doubt; and that, in a majority of cases of convergent strabismus, due to hypermetropia, it is present, is also beyond doubt; but that it has anything to do

with the diminished acuity of vision is a matter of much doubt. As well might the halo round the macula be accused of a pathological significance.

Few oculists examine normal eyes, or, if they do, it is by the inverted method, and with some definite object. Such appearances as "shot-silk" retina would then be unobserved. In strabismus and other refractive cases, the appearance, if found, is likely to be in some way held responsible for the error. The kind of mirror and the amount of illumination used in the examination make a difference. A short focus mirror, a dull light, and a small pupil, are the most favourable conditions for observing the appearances.

A CASE OF CONGENITAL HYDROCELE, TREATED BY LIGATURE OF THE NECK OF THE SAC.

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CHARLES K., aged 18, presented himself as an out-patient in January 1882, with a swelling of the right side of the scrotum, which had been present as long as he could remember. The swelling, which was somewhat pyriform in shape and about the size of a small orange, presented all the characters of a congenital hydrocele of the tunica vaginalis; it was soft, translucent, and fluctuating, surrounding the body of the testis. When the patient coughed, a slight impulse could be perceived. On pressing gently on the swelling or on raising the scrotum as the patient lay on his back, it gradually disappeared, slowly reappearing when he stood up. The testis on the same side was extremely soft, and somewhat smaller than the other. The patient was ordered to wear a truss day and night, in the hope that the constant pressure of the pad upon the neck of the sac might procure obliteration of the canal of communication between the peritoneal cavity and the tunica vaginalis. This treatment was continued for three months, but without any appreciable result, the canal still remaining patent.

It was then determined to perform a radical cure by ligaturing the neck of the sac, as in the plan often adopted in the radical cure of hernia. The patient was accordingly admitted into the hospital; and on April 18th, under anaesthesia, an incision an inch and a half in length was made in the direction of the cord, commencing above directly over the external ring. The cord having been exposed for the same distance, the neck of the sac, which was about the size of a goose-quill, was carefully dissected from it, and then ligatured with strong catgut in two places, namely, just below the external ring and at another point about one inch lower down, care being taken not to include the cord in the ligatures. The neck of the sac was then divided between these two points, and the external wound closed, a small drainage-tube being left in the lower part of the incision. The operation was performed under the carbolic spray, and the wound dressed according to the Listerian method. The wound was completely healed on the seventh day, and the patient left the hospital on April 29th, there still being slight swelling of the scrotum, owing to the presence of a little fluid in the tunica vaginalis; but in the course of a few weeks this gradually disappeared, on painting the skin with tincture of iodine, and keeping the parts well raised in a suspensory bandage. When the patient was last seen, about six months after the operation, all trace of the hydrocele had quite disappeared.

REMARKS.—Congenital hydrocele, though not uncommon in infants and young children, usually disappears as the child grows older, especially if a truss be constantly worn, the irritation produced by the pad setting up slight inflammation in the neck of the sac, which, as a consequence, becomes obliterated. The fluid present in the tunica vaginalis, if absorption do not take place naturally, can then be readily removed by tapping, or it gradually disappears on the application of some slight irritant over the scrotum; and, as a rule, no further re-accumulation takes place. The affection is consequently of somewhat rare occurrence in adults; and the treatment by the method of radical cure employed in this instance should, as a rule, be reserved for the cases where obliteration of the canal of communication cannot be obtained by simpler means. So long as the neck of the sac is patent, an open canal is present, along which a hernia may at any time descend—a result which it is, of course, very desirable, if possible, to avoid. The operation was, therefore, undertaken in the present case, not only with the object of curing the hydrocele, but also with a view to prevent the formation of a hernia taking place.