of a case of pericarditis, states that he was disappointed by finding the patient make no progress towards recovery; day by day the rubbing sound remained unchanged. He observed that the patient was oppressed and melancholy, and then discovered that he had great fears as to his spiritual state, and was full of doubts on many points of his religious belief. Under these circumstances, Dr Stokes asked a clergyman distinguished for his talent and eloquence to visit his patient. This interview was followed by the best results. Next day the rubbing sound had become softer; the visit was repeated, and on the third day all morbid signs had disappeared. (*Diseases of the Heart and Aorta*, 1854, p. 22.)

CASE VI. I had myself a somewhat similar experience in a case of delirium tremens from drinking. The symptoms exceeded in urgency and obstinacy any reason which could be assigned, and did not coincide with a tolerable appetite and steady digestive powers; they subsided and returned in a very incomprehensible manner, notwithstanding the favourable action of opium, and the pulse was often as high as 120. All my inquiries failed to discover the presence of mental disturbance, until one day my patient voluntarily unburdened his mind on a subject causing great anxiety and remorse, with every demonstration of intense emotion, and with the confession that he had felt tempted to commit suicide. On the next day but one, his whole condition was changed, and his pulse had fallen to 80.

[To be continued.]

ROYAL LONDON OPHTHALMIC HOSPITAL.

CASE OF INFANTILE IRITIS.

Under the care of A. POLAND, Esq.

JAMES S., aged 5 years, was admitted an out-patient under Mr. Poland's care, May 26, 1861, for sequela of iritis. The right eye only had been attacked. Of this he was now quite blind, but the other eye appeared quite normal, and he could see well with it. The child was now brought on account of an attack of pain in the eye, which, however, soon passed off, and it relapsed into the condition in which it had been from the acute attack in infancy four years before. The only history of this was that obtained from an hospital letter, on which was written by Mr. Poland, "acute iritis, one week; irregular pupil, discoloured iris, adhesions, and lymph." The child then took hydrargyrum cum creta for one month.

There was no symptom of syphilis in the child's infancy, except the iritis; but it was ascertained from the father that he had had primary syphilis about the time of his wife's pregnancy with this child; and he (the father) also soon afterwards attended Mr. Wordsworth for some disease of the choroid, no doubt syphilitic. His wife had only had two children, of whom the patient was the eldest. The other was delicate, but presented no evident symptoms of syphilis.

The child was rickety, had not walked until the age of three years, and did not begin to talk until the same age. He cut his teeth early, but soon lost the incisors. The canines were of that peculiar tusk-like form described by Mr. Hutchinson as common in young syphilitic children. As to the eye, little is to be said, as it merely showed the results of bygone inflammation. The pupil was closed, the globe was prominent and rather tense, and the iris was pressed forward in one sheet towards the cornea. The cornea was quite clear.

In this case attention has been drawn to the teeth as being affected by syphilis; but to prevent error, it may be well to add that those are not the syphilitic teeth on which the diagnosis of congenital syphilis is founded in cases of syphilitic corneitis. Mr. Hutchinson's views

on this subject may be remembered by this sentence: That syphilitic corneo-iritis occurs in association with malformation of the permanent central upper incisors; and that this malformation is a narrowing of the tooth from side to side, so as to be narrowest at the cutting edge, which edge also is more or less notched.

If, then, the central upper incisors of the temporary set had been present in this child, we should not look for a notch; but we may probably find them in the permanent ones when they are cut. This note is not unnecessary, as all kinds of mistakes have been made as to the set affected, the special teeth attacked, and the kind of malformation.

CASE ILLUSTRATIVE OF THE USE OF THE OPHTHALMOSCOPE AS A MEANS OF DIAGNOSIS.

By J. C. WORDSWORTH, Esq., Assistant-Surgeon to the Hospital.

Laceration of the Retina produced by a Blow on the Eye from the Cork of a Ginger-beer Bottle. J. S., aged 34, a captain of a ship, applied to me on account of an injury to the left eye, which had produced nearly complete loss of vision. He stated that while opening a bottle of ginger-beer, the cork flew out, and struck him on the eye as he was holding his head over it. He was much stunned by the blow, reeled, and became faint. Soon afterwards, he was very sick and vomited. He suffered considerable pain in the eye, and became so blind that he could not see a lighted candle held before him. He called in his usual medical attendant, who prescribed a cold lotion to be applied to the eye; but as sight did not return at the end of a fortnight, he called on me for assistance.

Oct. 4. He could see large objects indistinctly, such as the hand passed between him and the light; but to do so, he was obliged to turn his head, so as to allow the image to fall on the inner half of the retina. When he attempted to see straight before him, vision was confined to mere perception of light. He had no pain in the eye, but a sense of uneasiness and tension. Slight pressure on the globe was attended by some tenderness. The pupils were of average size, round, and corresponded in all respects; the irides acting well under the stimulus of light admitted to the retina of each eye alternately, so as to produce its direct and indirect impression. The tension of the globes, too, corresponded. So far as ordinary exploration by daylight could reach, no structural tension was perceptible. The eye was then examined by the ophthalmoscope; but the pupil became so small by the admission of so much light, that a satisfactory examination could not be made without dilatation by atropine. A drop of the solution was therefore placed on the conjunctiva, and produced mydriasis in a few minutes. On illuminating the fundus by the speculum alone, the reflected rays suffered some obstruction, apparently on the posterior surface of the crystalline lens, by which a slightly shaded field was produced. This was so inconspicuous, that oblique illumination did not show any opacity in the lens. The fundus was then more minutely examined by using the biconvex lens, and at once a large wound of the retina became visible. It was in the axis of vision, and appeared to involve that most important part of the retina occupied by the "yellow spot." It consisted of a rent, apparently about four lines in length, intersected by a shorter one, producing a kind of irregularly "starred" wound. Beneath this wound, blood had been poured out, and formed a thin stratum between the retina and choroid. The edges of the laceration appeared thickened and opaque. The fundus generally was hyperæmic; the optic nerve being red, and its vessels enlarged.

REMARKS. I have selected this case to illustrate the

use and value of the ophthalmoscope in diseases and injuries of the eye, principally on account of its simplicity. It will be admitted that it affords a striking example of the exact diagnosis that we are enabled to make by the aid of this important instrument; and so to clear away much of the doubt and uncertainty that necessarily attach to the investigation of these important affections. It also enables me to make a few comments on the appearances observed, that may be of interest to those who have not hitherto given much attention to this subject, and to whom the mere narration may not convey a very definite and intelligible outline of the case. Though the ophthalmoscope affords most exact information to the expert, it is unquestionable that the tyro will experience both difficulty in observing, and uncertainty in recognising morbid appearances. Hence, the necessity of commencing this mode of investigation on the simplest and most palpable cases. Many who attend the practice at the Ophthalmic Hospital, attempt to use the instrument, for the first time, on eyes that are difficult to examine, even by those accustomed to its application. No wonder, then, that they often are so discouraged as to abandon the effort altogether; while a little preparation would have enabled them to proceed with confidence to the attainment of their object. For the physiological examination, the eyes of the dog or cat afford great facilities to the beginner. He may then observe the eyes of children, as they may be explored with less difficulty than those of adults, and are, of course, excellent illustrations of the typical forms of normal eyes. On some points in the case above detailed, I shall now offer a few comments. In the first place, it was observed that the illumination of the eye was partially obstructed by a change in the crystalline that produced some shade in the image reflected from the fundus of the eye while using the speculum alone. The ophthalmoscope enables us, with the greatest precision, to ascertain the presence of any opacity in the structures situate in front of the retina, and, generally, so far as the anterior segment of the eye is concerned, we can diagnose with great exactness the position and other relations of the opacity, and so to say whether it depends on alterations of the crystalline or vitreous. The amount of opacity may also be estimated by projecting light obliquely into the eye. This can be done very conveniently with the speculum and a convex lens. The two modes materially assist each other.

BIRDS DOING GOOD TO FARMERS. This interesting question, so important to the farmer and to society at large, has had much light thrown on it by the recent French report, which proves that the destructive war carried on against little birds in France is becoming so injurious, and has spread so widely, that the serious attention of Government has been called to the subject, and remedial measures are about to be adopted to meet the evil. The popular little work of M. Michelet (not the German philosopher, but the French historian and amateur naturalist), *L'Oiseau*—composed in so beautiful a style, and in a spirit of such love and attachment to birds—has carried into every region the benevolent spirit of the author, and made him a most effective agent in creating a more tender regard for them, and a wiser conception of their important uses in the great system of the Author of Nature. It is M. Michelet who says,—“L'homme n'eût pas vécu sans l'oiseau, qui seul a pu le sauver de l'insecte et du reptile; mais l'oiseau eût vécu sans l'homme.” With reference to the disappearance of little birds from France, he says:—“De nombreuses espèces d'oiseaux ne font plus de halte en France. On les voit à peine voler à d'inaccessibles hauteurs, déployant leurs ailes en hâte, accélérant le passage, disant, ‘Passons! passons vite!’ Evitons la terre de mort, la terre de destruction!” (*Notes and Queries.*)

Original Communications.

MEDICAL PSYCHOLOGY.

By ROBERT DUNN, F.R.C.S.E.

[Continued from p. 302 of last volume.]

II. *On the Nervous Instrumentality or Apparatus through which the Phenomena of the Mental States are manifested.* We have next to inquire into the nervous apparatus of the sensational, perceptive, and intellectual phases of consciousness.

Now it is universally conceded that the brain or encephalon, in its totality, is the material organ of the mind, where the ultimate molecular changes precede mental states, and where the mandates of the will originate the changes which lead to and terminate in acts of volition. But, as I have elsewhere observed, “be it remembered, in affirming that sensation, perception, emotion, thought, and volition are functions of the nervous system, it is only maintained that the vesicular matter of the encephalic ganglia furnishes the material conditions—the substratum through which these mental phenomena are manifested in this life; and, at the same time, it is fully admitted that the essential phenomena of matter and of mind are so completely antagonistic, it is in vain that we attempt to establish any relationship of analogy or identity between them.” (*Vide Essay on Physiological Psychology*, p. 7. Churchill: 1858.) In truth, to us, the abstract nature both of matter and of mind is alike inscrutable. We can no more comprehend the essence of the one than we can that of the other; for the forces of external nature which underlie all vital phenomena, and the changing states of consciousness, which constitute our mental life, are as inscrutable to us as is that internal something of which consciousness itself is the exponent. But, whatever may be our belief as to the abstract nature or essence of mind, this at least is indisputable, that *sensibility* and *mobility* are its primordial points of contact with the external world or nature; and it is clearly demonstrable that these essential attributes have their seat in the sensory and motor ganglia of the nervous system. In the life of relation, indeed, and throughout the whole animal kingdom, the nervous system is the medium of communication with the external world. This system, in its simplest but essential type, consists of *nervous centres or ganglia, commissures, and nerves*. The vesicular matter of the nervous centres or ganglia is the source of the nervous force, where impressions are received and impulses are generated; between these centres, the commissures are the media of communication; and to and from them, the nerves are internuncial conductors or cords. In the invertebrate sub-kingdom is best seen the simplest form of the nervous system; namely, distinct ganglia, with commissural cords and nerves, administering to the functions of automatic life, and to the operations of instinct. Now nervous actions are of a threefold character—physical, or *excito-motory*; sensory, or *sensori-motor*; and volitional, or *intelligent*. But it is only in the highest class—the vertebrata, and where there exists a cerebro-spinal system—that we recognise the existence and co-ordination of all these different kinds of nervous actions. In the very lowest animal organisms, the physical or excito-motory alone are present. These are essentially automatic, and occur without sensation; to them, in the invertebrate kingdom, and as typical of animal life, the sensory or sensori-motor are superadded; whilst it is solely in the vertebrate series that the intelligent and purely voluntary come into play. Throughout the whole of the vertebrate subkingdom, the type of the nervous system, including man himself,