

ping the left ear has no effect on the subjective noises. There is slight pain in the occipital region, occasionally. The attacks of dizziness, nausea, etc., are preceded by a full feeling in the head for about fifteen minutes. In walking there is a tendency to walk off into the gutter, or against the side of the adjacent building.

The first attack came on about four years ago and lasted for thirty days. During the height of the attack there is usually nausea and vomiting; after two to four weeks the symptoms subside and dizziness remains as the chief sign. The attacks are usually about one year apart and seem to depend somewhat on the season. The onset of winter seems to precipitate one. The last attack came on in November, 1898, and lasted until April 4, 1899, when it was suddenly relieved by Politzerization at the hands of Dr. Weaver. The ears have been inflated about three times a week since then.

In the physical examination of the drumhead in the left ear the drumhead was markedly retracted, lusterless and thickened along the manubrium, in the right slightly retracted, lusterless, and also thickened along the manubrium. Tuning-forks ranging from 26 to 2048 vibrations per second were heard with both ears, but more faintly in the left. The Weber test gave plus in the right or better ear. The Rinné experiment gave right ear $= +5''$; left ear $=$ no bone conduction. The Politzer acoumeter was heard but a few inches from either ear. The Galton whistle was heard to about 40,000 vibrations per second in each ear.

The above group of symptoms seems somewhat contradictory at first thought, but when these are studied carefully they are found to be characteristic of a certain type of middle ear instead of labyrinthine disease, or of stomach disorder. The presence of increased bone conduction on the right side, and the absence of bone conduction over the left mastoid seem to point to some form of nerve or labyrinthine deafness. When the deafness is due to middle ear disease there is usually an increase of bone conduction on that side, while if the deafness is due to nerve or labyrinthine disease there is a decrease of bone conduction on the deaf side. This gentleman is most deaf in the left ear and bone conduction is entirely lost on that side, while it is comparatively greater on the right side or side of best hearing. Thus far the signs point to nerve or labyrinthine disease. When, however, we remember that the Galton whistle was heard to the normal limit—40,000—it becomes apparent that there is need of further investigation before deciding as to the exact nature and location of the disease. If it were true nerve deafness the high tones of the Galton whistle would not be heard. I accordingly inflated the tympanic cavities through a catheter and again tried the Rinné experiment with the remarkable result as shown in the following statement: Rinné right ear, $+10''$; left ear $+10''$. In other words, bone conduction had been restored in the left ear, both ears now approaching well toward the usual normal Rinné test.

The explanation is simple: the extreme retraction of the drumhead had forcibly driven the foot-plate of the stapes into the oval window, thereby producing increased intralabyrinthine pressure which accounts for the loss of bone conduction on the left side. Real nerve deafness does not exist, but there is a functional disturbance due to a change of tension. The nausea and vomiting were also due to the increased intralabyrinthine pressure and not to real stomach disease. The case is certainly not one of Meniere's disease, as in that disorder there is sudden and complete, or almost complete, loss of hearing,

attended by nausea and vomiting, all of which are due to an effusion of blood and plastic lymph into the semi-circular canals and vestibule. The hearing is rarely if ever improved after such an effusion. In this case there was no great loss of hearing and there are abundant evidences of disease of the middle ear to account for all the phenomena in the symptom-complex herein recorded. The case may be called Meniere's symptoms, but not Meniere's disease. It is in reality a case of chronic otitis media with great retraction of the left drumhead whereby intralabyrinthine tension is increased.

100 State Street.

Correspondence.

Malarial Hemoglobinuria.

CINCINNATI, OHIO, July 30, 1899.

To the Editor:—I have been particularly interested in the articles on malaria, in the JOURNAL of July 29. Coming from such acute observers as Dock and Fackler, they can hardly fail to attract attention, and certainly influence if not compel belief. Of especial interest is Dr. Dock's handling of that much discussed subject, malarial hemoglobinuria, and his remarks concerning the frequency with which this complication is reported on insufficient grounds, i. e., without corroborative blood examination, leads me to report a case in which the diagnosis was repeatedly confirmed by the use of the microscope. In brief, the history is as follows: A white adult male, aged 40, with frequent attacks of chills and fever for over a year previous to passage of blood in his urine, had taken quinin irregularly during that time, but had not taken any for several weeks previous to his hematuria. Blood had appeared constantly in his urine for two weeks previous to his coming under my observation, at times, he claims, almost pure blood being passed. In addition, he complained of progressive weakness, rapid emaciation, nausea, anorexia, dizziness, shortness of breath, palpitation, slight tremor of limbs, and cough. Physical examination: temperature 100, pulse 100, respiration 30; lungs showed a few coarse and fine mucous rales at apices anteriorly and posteriorly; heart normal; spleen somewhat enlarged; no enlargement of liver. Urinalysis: color light amber, acid reaction, sp. gr. 1010; sediment reddish, amorphous and very abundant; albumin present and in considerable quantities; no sugar; no bile. Microscopic examination shows a few red corpuscles and a large number of "shadows," a few crystals of uric acid, urates, granular and epithelial casts. Examination of the blood revealed crescents and ovoids; no other form found at that time. He was put on Fowler's solution, gtt. iii, three times a day, to be increased one drop per day. By the next day he had passed nineteen ounces of urine, and the red sediment and albumin were much less abundant. He was not given quinin at that time, the latter drug having but little influence over the estivo-autumnal parasite. On the second day he passed fifty-one ounces of urine with but slight red sediment. Quinin bisulphate was now started, 5 grains three times a day; the quinin did not increase the amount of blood in the urine. On the seventh day he passed seventy-three ounces of urine; flagellate bodies were seen in the blood for the first time. By the tenth day the blood had disappeared entirely from the urine, though albumin and casts still persisted, but no "shadows." At that time the quinin was increased to gr. x, t. i. d., and the Fowler's solution had increased to gtt. vi, t. i. d. This treatment was kept up for forty-five days, and by that time no plasmodia had been observed for over a week. I then lost sight of him for a time, but subsequently, on dropping his treatment after a few months, he was again attacked with the passage of bloody urine. One other point of interest in the case was that after a month's treatment as above, the hemoglobin was found un-

changed, on both occasions registering 37 per cent. division of two drops; nevertheless he gained markedly in weight and in health and strength. I am somewhat inclined to the belief that the destructive action of the quinin on the red blood-corpuscles neutralized in a way the good effects obtained by the administration of arsenic. Here then is an unmistakable case of malarial hemoglobinuria which was given quinin during the time of the passage of the blood, yet the blood in the urine, so far from increasing, steadily diminished. I have never seen an instance of hemoglobinuria in one of the regularly malarial intermittents, but have no doubt that if such occur, the result would be more favorable under quinin even than the case I have just reported. I do not think that even if quinin does produce hemoglobinuria in malaria, which I do not believe, that factor alone should deter us from using a drug which is almost a specific to the disease which we do know is frequently accompanied by this complication.

In regard to hypodermic injections, I wish briefly to state my experience with 7 cases of malaria all treated in this manner: all young adult males with fairly good family history; all of tertian malaria, 6 double and 1 single, in all of which the diagnosis was made by microscopic examination. In 3 all manifestations of the disease were stopped by one injection; in but 1 was no influence felt by one injection; in but 1 case was more than 6 grains given at a dose; the bisulphate was the preparation of the quinin used; all the injections but one were made deep in the gluteal region; very little pain was experienced, and that only at the time of the injection; but ten injections were used in all; no abscesses resulted from their use. In the cases in which an endeavor was made to change a quotidian or double tertian malaria into a single tertian by hypodermic injection of quinin, 1 was completely successful; 2 were partially successful; 3 were unsuccessful. Of these 3 cases 2 were completely cured by one injection, as shown by subsequent clinical history and blood examination; the remaining case was not much affected. I might say in conclusion that the injections were given at the very beginning of the chill. Very truly yours,

MARK A. BROWN, M.D.

Dr. Murphy's Letter on Optical Diagrams.

RICHMOND, IND., July 31, 1899.

To the Editor:—In the JOURNAL of July 29, there is a letter by Dr. Murphy of Kansas City as to "Misleading Statements and Illustrations in School Physiologies, Physics, and in Text-Books on Diseases of the Eye," but unfortunately in this case it is Dr. Murphy who is misleading. He states that the text-books teach that parallel rays of light focus on the retina in the normal eye. This is just what they have taught, do teach, and always ought to teach.

The first three illustrations, which he states are incorrectly drawn, are just as correct as his Figures 5, 6 and 7. Possibly some slight objection may be made to them all, in that they take for their basis the old ray theory, which is entirely superseded by the wave theory.

Scheiner's experiment any one can perform by taking a visiting card through which two pinholes have been pierced, the distance between which is less than the diameter of the pupil; it will be found that if this diaphragm is held close to the eye while a bright star is being observed, and the subject is ametropic, there will appear to be two stars. If the upper right pinhole is covered with a red glass, while the subject is hyperopic, the red star will appear below; whereas, if myopic, the red star will appear to the observer as if from above. In the emmetropic there will be a fusion of the red and white stars into one.

This merely proves that Figures 1, 2, and 3 are consistent, for waves or rays from a star, that enter the pupil, are parallel. If we can suppose a case in which the upper part of the

star was flattened so that we could tell it from the lower part, then in Scheiner's experiment, no matter if the observer was myopic, emmetropic, or hyperopic, in every case the flattened part of the star would face the lower part of the retina, while to the observer it would appear erect with the flattened part at the top, as in Nature.

DAVID W. STEVENSON, M.D.

Retention of Life.

WASHINGTON, PA., July 31, 1899.

To the Editor:—Appropos of the editorial on "Retention of Life," in the JOURNAL of July 29, allow me to mention two cases which came under my observation in the past two years, while an interne in Western Pennsylvania Hospital.

The first patient, a slender youth of 19 years, slipped while attempting to board a moving train. The wheels crushed the right upper arm, right side of the pelvis, and left thigh. He reached the hospital in ten or fifteen minutes. Bleeding had stopped, but the cinder-covered bowels were protruding over the crushed right os innominatum and lateral abdominal wall. The patient was conscious and rational for fully an hour after the injury, until he died.

In October, 1897, a young tramp was found beside the Pennsylvania tracks, and brought to the hospital by ambulance. Examination showed both thighs entirely severed from the body, so closely to the pelvis that no operation could have given the needed flaps. The wounds were merely dressed; yet the patient lingered for almost a week. During this time death was expected almost hourly, yet consciousness remained till near the end.

To my mind such cases illustrate Nature's method of arresting hemorrhage from severed vessels—torsion. In this section of the country some surgeons rely almost exclusively on twisting the arteries to stop bleeding during an operation, and I have seen no untoward results, even when the popliteal and brachial arteries were twisted. The method certainly is deserving of more prominence than our works on surgery give it. Very truly yours,

THOS. WRAY GRAYSON, M.D.

[Arresting hemorrhage by torsion has been discussed in medical journals, is mentioned in most of the text-books, and is used to a great extent by many surgeons. Our correspondent is mistaken if he thinks the method is not recognized.—Ed.]

Yellow Fever.

WASHINGTON, D. C., Aug. 5, 1899.

To the Editor:—Among the outbreaks of yellow fever that have prevailed at Fortress Monroe, Va., and its vicinity let me mention one that has never been reported. In the early part of August, 1869, I had just come from quarantine duty at the mouth of the Rio Grande River, Texas, and being ordered to Fortress Monroe, found a French man-of-war quarantined in Hampton Roads because of yellow fever. Many of the crew having died, as well as the medical officers, the ship was visited daily by a surgeon from the fort, who went unrestrained about his duties after coming ashore. It was not long, however, before an unmistakable case of the fever broke out in a member of the family of one of the surgeons who had most to do with the fever patients on shipboard. We decided to keep the matter strictly secret, even from the commanding officer, and await developments. Happily the patient made a good recovery, and the disease did not spread. To this day no one but the two medical officers in attendance have ever known of its existence. To be sure, one case does not demonstrate much, but this instance shows the transmissibility of the disease, and the fact that its spread was controlled by isolation, and perhaps secrecy; for had the presence of yellow fever become known at that time among the twelve hundred people in this fort, many of them women and children, there is no telling how the panic ensuing from publicity of the fact would have ended.

IRVING C. ROSSE.