

IV.—Barometer (Adie's Marine) corrected for capillarity and index error, and reduced to temperature of 32° F.

|                    | Max.   | Min.   | Med.   |
|--------------------|--------|--------|--------|
| At sunrise ...     | 30·173 | 29·969 | 30·022 |
| At 10 a.m. ...     | 30·208 | 29·980 | 30·131 |
| At 4 p.m. ...      | 30·158 | 29·938 | 30·025 |
| At 10 p.m. ...     | 30·210 | 30·028 | 30·073 |
| General result ... | 30·210 | 29·938 | 30·063 |

Range of barometer .272 inch

V.—Hygrometer (wet and dry bulb).

|            | Dry bulb. | Wet bulb. | Dew point. | Elastic force of vapor. | Comparative humidity. |
|------------|-----------|-----------|------------|-------------------------|-----------------------|
| At sunrise | 58·6      | 56·1      | 53·8       | 411                     | 835                   |
| At 10 a.m. | 65·4      | 61·2      | 57·8       | 497                     | 766                   |
| At 4 p.m.  | 71·7      | 65·0      | 59·6       | 510                     | 657                   |
| At 10 p.m. | 60·8      | 57·6      | 54·8       | 430                     | 808                   |

Comparative humidity of month saturation = 1000 ... 788

VI.—General direction of wind, Nthly.

REMARKS.

The foregoing summary will be continued monthly, and additional observations by self-registering instruments, and the anemometer will be recorded as soon as the instruments have been properly placed. It is hoped that other observers may record in a somewhat similar form the results of their observations. The value of a series of such records cannot be overrated, and it is only by a comparison of similarly arranged weather statistics at different stations that the true characters of the climate of the country generally, and the local variations can be arrived at.

CASES FROM PRACTICE.

CASE OF CHOLERA.

By HENRY CAYLEY,

OFFICIATING CIVIL SURGEON, HOWRAH.

A PALE, delicate-looking girl, twelve years of age, of East Indian birth, was admitted into the Howrah General Hospital on the 21st instant, at 9 a.m., with symptoms of cholera. She had been quite well the previous day, and slept well at night, but on getting up she felt ill, and was attacked with vomiting and purging. On admission the algid stage was commencing. She was at once put to bed, a small dose of calomel and opium given, and mustard poultices and hot bottles applied. In three or four hours collapse was complete, and vomiting and purging continued frequent. She was treated chiefly by small frequent doses of warm fluid food, and a hot-water enema was given. About six hours after admission slight warmth had returned to the surface of the body, and the pulse again became perceptible. In placing a thermometer in the axilla, the mercury went up to 96°, but being struck by the coldness of the breath on my hand, on my putting the instrument in the girl's mouth, the mercury at once fell to 89°, although I carefully shut the mouth to prevent the cooling effects of evaporation. I do not remember even to have seen the fact noticed of the temperature inside the mouth being so much below (7 degrees) that of the surface in the axilla, nor can I account for it. The girl died about two hours afterwards in a sort of faint, before reaction was fully established; and after death, as one so often sees, the temperature rose considerably.

I have not been able to trace how the case originated; there has been little or no cholera in Howrah; no other cases have occurred near where the patient lived. She had twice bathed in a tank in the compound, the day before she was attacked; could the disease in any way have been communicated to her through the tank water?

Feb'y. 26th, 1867.

RARE CASE OF "MONSTER."

By W. P. HARRIS, M.D.,

SHAHJAHANPORE.

A MALE monster, with two bodies joined together, front to front from above downwards as far as the navel, and possessed of only one brain.

The presence of the one brain determined the whole conformity of this monster.

The brain was well formed, and situate with its anterior hemisphere looking to one side of the conjoined bodies. It was bounded by bones of the skull arranged as follows:—Frontal bones separated by a distinct suture enclosing the anterior hemispheres; beyond these, temporal bones below and parietal bones above, and occipital bones looking to the spine of each body. On the side of the expanded skull, on which there was no face, the frontal bone was absent (though there was a double set of all the other bones), and the calvarium was enclosed at that side by the two pieces of parietal bone meeting each other. The whole external configuration was made to conform to the peculiar position of the anterior hemispheres of the brain, as there was a face looking over the shoulders, so to say, of the conjoined monster, and a compound chest under the face formed of the right clavicle, right half of the sternum, and right ribs of one child, conjoined with the corresponding left parts of the other child. The two bodies forming the monster were as though the thoracic and abdominal cavities of each had been opened by an incision from between the clavicles extending through the centre of the sternum, and along the abdomen as far as the navel, and then had been expanded and joined front to front. (See *Lancet*, page 548, dated 11th November, 1865, for a drawing of a case of double monstrosity, which is from the shoulders downwards an exact representation of my case).

Inside the chest case and abdomen thus formed, one set of lungs and one heart were in their correct relative positions, and a large liver extended from the hypochondrium of one body into that of the other.

There was another set of organs situated behind these, not so fully developed.

The circulation passed through a large umbilical vein into the liver of the facial side of the monster; then through a vena cava into the right auricle, and thence through the foramen ovale into the left auricle, left ventricle, and ascending aorta to the brain; thence returning *via* the superior cava, right auricle, and right ventricle, pulmonary artery and ductus arteriosus, into the descending aorta; this was very large, and gave off large branches and vessels between the two livers.

It appeared to be from these large connecting branches that the liver and organs situate on the non-facial side were supplied, inasmuch as the umbilical cord of that side was impervious, and the blood of the descending aorta of the same side did not terminate in the usual way in the placenta *via* the hypogastric and umbilical arteries, but was expended in supplying the lower extremities of one of the bodies.

"The law of symmetry, conjugation, or affinity, founded upon the general observation that all formations proceed from the circumference to the centre, and that the body generally, and each organ, is originally divisible into two parts; that each part grows towards the medial line, where it meets its opposite, and is joined to it, receives an elucidation from this case."

In this monster, one side of the single brain was connected with the spinal cord of one body, and the other side with the spinal cord of the other; thus each may be said to have possessed a distinct brain and cerebro-spinal axis formed of one hemisphere and one-half of the spinal cord,—in the case of the former organ conjoined with, but in the latter widely separated from, its corresponding portion through arrest or abnormal development, preventing the two halves meeting and uniting, as occurs in the normal condition.

In what way was this monstrosity developed? Kirkes says that "the nervous matter constituting the substance of the rudimental spinal cord and brain are the first parts of the embryo that are developed. The parts then unite from opposite sides." In this case the brain or cerebral vesicles united, but the rudimental spinal cord appears to have remained disunited, and in process of time each half to have become developed into a perfect spinal cord, and this independent nervous-centre to have brought in its wake all its dependencies, *i. e.*, limbs, &c., &c., the one brain, from its dual action, being sufficient to preside over the two perfect bodies.

Thus this case is another proof of the correctness of Dr. Wigan's theory, that we all have two perfect brains enclosed in

one skull, each capable of performing all the functions of both combined.

The facts supporting the above view that this germ was single are the following: first, there was an entire absence of the vestige of a second cerebrum; second, the spinal cords of the two bodies were equally attached to the two sides of the cerebrum, so that one of them could not have been acephalic. Hunter used to maintain that the theory of unity of organisation received nowhere more ample illustration than in these cases of monstrosity. Here, for instance, we have the brain presiding over more than one spinal cord.

Something analogous to this may perhaps be met with in some of the lower divisions of the animal kingdom.

The monster was premature, thirteen inches in length, and so small as to produce no difficulty at the time of labour. The mother was a poor native, whom I did not see myself, but her husband stated that she was quite healthy, without any malformation, and that she had had no fright or accident during pregnancy.

She has had only one child previously, who is now a well-formed girl of five years of age.

#### CASES FROM THE EUROPEAN GENERAL HOSPITAL, BOMBAY.

By W. DYMOCK,  
ASSISTANT-SURGEON.

##### CASE I.—EPITHELIOMA.

CHARLES JOHNSON, aged 40, a Prussian sailor, of a weak encephalic appearance, was admitted on the 1st June, 1866, with an epithelial tumour of the scalp above and behind the right ear. The tumour was removed by operation, and cicatrization progressed favorably, until the wound was nearly healed; the growth then commenced to sprout again, raising the cicatrix in a nodulated form.

On the 1st July, application of the chloride of zinc was commenced, and the patient was ordered a nitro-muriatic acid mixture and nourishing diet. The urine gave a copious deposit of lithic acid and oxalate of lime. During the whole of July the chloride was applied, and the sloughs removed by charcoal poultices, but the growth constantly re-appeared in the granulating surface.

On the 11th August he complained much of difficulty in urinating. On examination three large globular piles were discovered.

On the 14th the piles were tied, and in a few days came away, to the great relief of the patient. During the remainder of the month of August, the chloride was occasionally applied, and over the lower part of the sore a good cicatrix was obtained, but the morbid growth still continued at the upper margin.

From the 1st September the patient began to decline rapidly in health, his appetite failed, and he suffered much from wandering pains in the limbs.

On the 16th a severe attack of diarrhoea commenced, and several small tumours were observed over the ribs. The diarrhoea proved fatal on the 24th.

##### POST MORTEM EXAMINATION (8 hours after death.)

*Brain.*—Forty-seven oz.; no abnormal appearance; on the internal surface of the right parietal bone a small cauliflower growth, the size of a nut, was seen, and on the internal surface of the occipital similar growths of a larger size; these tumours were between the bone and dura mater.

*Thorax.*—Several large growths were seen springing from the ribs on the right side; on the left several smaller growths; some of these corresponded with the external tumours seen during life; from the internal surface of the sternum sprang another tumour of the same kind; the bronchial glands were converted into masses of epithelioma; small deposits were found thinly scattered through the lungs; the heart was healthy; the right side contained a soft clot; the left was empty; weight  $8\frac{1}{2}$  oz. The lungs weighed—right 20 oz., left  $15\frac{1}{4}$  oz. The liver weighed 58 oz.; it contained numerous deposits of epithelioma, from a millet seed to a large hazel-nut in size; its vessels were quite normal, so also were the hepatic cells; the gland was generally ex-sanguine; the gall bladder contained some watery orange-colored bile, and an orange-

colored flocculent precipitate. Biliary ducts normal; the epithelial deposits, when near the surface of the liver, caused a somewhat cupped and depressed white spot. The kidneys weighed, the right 7 oz., the left 6 oz.; on removing the capsules numerous small deposits of the same morbid material were seen, from a pin's head to a small pea in size; there was advanced granular degeneration of both glands; in one of the supra-renal capsules a deposit, the size of a hazel-nut, was found; attached to the other were several smaller deposits. Spleen 7 oz.; no disease; mesenteric glands infiltrated with epithelial deposit; one small cup-shaped deposit was found in the jejunum; the intestinal cana presented no other morbid appearance. The body was much emaciated.

##### REMARKS.

Such extensive deposits of epithelioma in the internal organs is very rare. The deposit in different parts of the body was carefully examined under the microscope, and found to consist of epithelial cells of various sizes, and nuclei supported by a delicate fibrous basis; wherever the surface of the deposit was free, it presented the cauliflower form, and where attached to bones, the calcareous portion of the latter was replaced by epithelial deposit, the ribs being quite flexible at the point of attachment of the tumours. Several specimens were sent to the Museum of the Grant Medical College.

##### CASE II.—SYPHILIS CIRRHOSIS.

WILLIAM MEAD, aged 32, an English sailor, who had been in hospital four months ago with a tubercular syphilitic eruption, was admitted on the 17th September, 1866, with ascites and slight anasarca of about ten days' duration.

*History.*—Has been in the habit of drinking spirits; has had syphilis often; three years ago had dropsy after exposure to cold and wet; has been four years in India, and has led an irregular life.

*State on admission.*—Mind wanders at times, but he can answer rationally when spoken to; abdomen greatly distended; urine very scanty and high colored; stools scanty, hard, and pale; some pure blood is passed with them; skin hot; pulse frequent and full; conjunctiva slightly yellow, watery; slight cough with semi-transparent grey mucous sputa; tongue dry in the centre; edges livid, a yellow fur; legs slightly œdematous; upper boundary of liver on a level with right nipple; lower and lateral boundaries cannot be made out; respiration a little harsh; heart's sounds natural; pulse 96; has suffered lately from ague.

℞ Calomel .. .. . grs. x.  
Pulv: jalap co: .. .. . grs. 60. s.s.

*Urine.*—Fibrinous flakes, and a deposit of globular lithates; treated with cold nitric acid, it turned of a purple color, and after standing deposited numerous beautifully transparent spindle-shaped crystals of a deep purple color, exactly resembling those described in the Microscopic Dictionary, under the head of Uroglancine.

19th.—Bowels have acted freely; urine much more copious, staining his linen, of a saffron color; abdomen less in size; upper boundary of liver one inch below the nipple; skin acting freely; stools of a citron color.

℞ Quina sulph: .. .. . grs. viii  
Morphiæ .. .. . grs.  $\frac{1}{2}$  s.s.

20th.—Urine copious, and with the stools passed in bed; general conditions the same; nitric acid added to the urine throws down pink fagot-shaped bundles of crystals of uric acid.

℞ Tisane of muriate of ammonia.

*Vespere.*—Very dull; pupils dilated. Head to be shaved, and a blister applied.

21st.—Roused by the blister; serum of blister of a saffron color; evaporated on a bit of glass, it gave globular crystals of leucine, and long needle-shaped crystals (tyrosine); general condition of patient much the same. Tisane continued.

22nd.—Answers rationally; all the excretions deeply tinged with bile; skin hardly tinged; pulse 84; stools and urine passed in large quantities, of the same character.

23rd.—Comatose; pulse 108; blister to nuchæ.

24th.—Roused by the blister, (continue.)

25th.—Deep coma again.

26th.—Died at 12-15 a.m.

##### POST MORTEM EXAMINATION (4 hours after death.)

Calvarium rather porous; brain normal, 48 oz.; heart 9 oz.; a white patch,  $1\frac{1}{2}$  inches in diameter, on its anterior surface; valves all healthy, hardly any coagula.