explored, yet the number of plants discovered, including marine, scarcely exceeds six hundred species—a scantiness which corresponds with that of the animal kingdom, of which, however, the deficiency is far more striking. The greater number of plants, too, both species and genera, are peculiar to the country; and, although lists of marine mammals, birds, reptiles, insects, fishes, shells recent and fossil, and annulose animals, have been furnished, as yet no terrestrial mammal, except bats, has been found in these islands.

The question, then, which arises, is this: Are the flora and fauna of New Zealand—so different to those of its antipodes—to be viewed as the development of a southern region, which is co-ordinate with an opposite state of the earth's magnetism to that of the northern? and if so, will its effects, so far as they affect organization, prove congenial to the system of living beings deriving their origin within the polar influence of a northern hemisphere? Should this inquiry, aided by science and experience, receive a favourable solution, there is no reason left to doubt the isogenetic character of the middle and south island of New Zealand, in reference to our zone, or that they will prove the most suitable home for the Anglo-Saxon that has yet been colonized by his race.

Bury St. Edmunds, Suffolk, April 1853.

BROW PRESENTATION AS A CAUSE OF DIFFICULT LABOUR.

By J. G. SWAYNE, M.D., Lecturer on Midwifery at the Bristol Medical School.

(Read before the Bath and Bristol Branch, March 24th, 1853.)

CASES of brow presentation are by no means frequent, and on this account, perhaps, have not been much noticed in connexion with difficult labour. In the two following instances, which occurred consecutively in my own practice, the severity and duration of the labour were both much augmented from this malposition. In one, delivery was effected by art, and in the other by the powers of nature.

CASE I was attended, in October last, by one of my pupils, who informed me, when I arrived at the house, that the membranes had ruptured the preceding evening, and that he had been in attendance upon the patient ever since, but that no progress had been made, although the pains were very frequent and severe. I found the right frontal eminence presenting, the head being fully engaged in the brim of the pelvis. The anterior fontanelle was towards the left acetabulum, and the face towards the right sacro-iliac synchondrosis. The finger easily reached the eyes and nose, and also the mouth, which was wide open; the chin, however, was above the brim, and could not be reached. As the head was in this position, notwithstanding that the os uteri had been dilated for some hours, and the pains had been very violent, I proceeded to alter the presentation without delay. Using a blade of a forceps as a vectis, I applied it over the chin; and by co-operating with the pains, brought the chin downwards and forwards, beneath the arch of the pubes, so as to convert it into a complete presentation of the face. The delivery was soon accomplished; but the child was still-born, probably in consequence of pressure made by the instrument upon the funis, which was twice coiled round the child's neck. In this case, the woman suffered for some months from loss of power in the right leg, produced, no doubt, by pressure of the chin upon the nerves of the sacral plexus.

CASE II. The next case I saw a few days afterwards, in consultation with my friend Mr. Leonard, who told me on my arrival, about five A.M., that he had been with his patient all night; that the membranes had ruptured the evening before, but that the labour was very tedious, although the pains were constant and powerful. I found the head rather low in the pelvis, with the face directly behind the symphysis pubis. The head was so firmly fixed in the pelvis that it was impossible to pass the finger sufficiently high to reach the chin, or in any way to alter the position of the head.

We therefore allowed the labour to go on naturally, as the head was forced perceptibly lower by each pain. At last the forehead presented at the os externum, the root of the nose being pressed against the sub-pubic ligament, and the anterior fontanelle against the border of the perinæum. The nose now remained stationary in that position, forming, as it were, the centre of the semicircle described by the rest of the head, whilst more and more of the vertex protruded with each pain. At last the whole was expelled, the vertex first, and then the face. The child was still-born, in consequence, no doubt, of the extreme pressure on the anterior part of the head, as the forehead was enormously swollen, and the whole face much distorted. In this case, the mother recovered without any bad symptom.

REMARKS. Presentations of the brow are intermediate between those of the vertex and those of the face, approaching, however, more nearly to the latter than the former. When the vertex presents, the head is said to be flexed upon the body, so that the chin is close to the chest; when the face presents, the head is extended completely, and the chin is as far removed from the chest as the neck will admit of. In a brow presentation, the head is partially extended, so that one of the frontal bones presents, most commonly either the right or left frontal eminence. At the commencement of labour, the presenting part might be included in a circle, the circumference of which touches the root of the nose on one side, and the great fontanelle on the other. On examining at this stage of the labour, the face would be found usually looking towards one sacro-iliac synchondrosis, and the great fontanelle towards the acetabulum of the opposite side, or *vice versa*. As the head descends lower, and becomes more fully engaged in the pelvis, the mento-occipital diameter will correspond with one of the oblique diameters of the pelvis, and thus will take a position at right angles to that which it occupies in an ordinary case; for then it is parallel to the axis of the pelvic brim, and is perpendicular to these diameters. In a brow presentation, the head is placed in the most unfavourable manner possible for traversing the brim of the pelvis; for the longest diameter of the head (the occipito-mental, which measures five inches) corresponds with the oblique diameter of the pelvic brim, measuring only four inches and a half. It is, therefore, scarcely possible for the head to traverse the pelvis in this position; and if it remains unchanged, the chin may be arrested for some hours at the brim of the pelvis, as in Case I. Nature, however, frequently remedies the difficulty, by causing complete extension of the head, as was done artificially in Case I. The chin descends, and the vertex recedes, so that the face, which before presented itself imperfectly, now occupies in full the superior strait: the case is thus converted into one of ordinary face presentation, which, as a general rule, requires no further artificial assistance, the diameters which face presentations offer being scarcely less favourable than the ordinary ones. In some rare cases, a still more favourable change is effected; the face, instead of becoming completely extended, flexes, and thus a presentation of the vertex is substituted spontaneously for one of the face; but in other instances the chin is arrested at the brim of the pelvis, whilst the posterior part of the head is forced down lower and lower with each pain, as in Case II: this is, however, effected with great difficulty and after much suffering, for a long diameter of the head, namely, the occipito-frontal, comes into relation with the principal diameters of the cavity and outlet of the pelvis; the result is, that compression of the anterior part of the child's head takes place to such an extent as to be, in all probability, incompatible with life.

In the treatment of these cases, it will be found, as a general rule, that manual interference is necessary, provided the malposition is not corrected by nature very soon after the rupture of the membranes. If this does not take place, and the labour is allowed to proceed, the risk incurred by both mother and child will be great; it is therefore necessary not to delay interference, otherwise the head becomes so firmly wedged in the pelvis (as in Case II) that it is scarcely possible to move it in any way; it may even be-

come impacted, and no other resource be left but craniotomy.

Two methods have been recommended for altering the position; the first consists in flexing the head, with a view to bring down the vertex. To do this, it is advised to make steady pressure with the finger upon the forehead, so that it may be arrested, whilst the back part of the head is pressed down by the uterine efforts, and the chin caused to ascend towards the chest. This mode seems very easy in theory, but will be found very difficult in practice; and I agree with M. Chaillly in considering it as next to impossible. By pressing on the forehead, we act on the centre, and not upon either extremity of the lever represented by the head, and thus have little or no power. The second method is much more feasible, and will generally prove successful; it consists in bringing down the chin (provided it can be reached) by two fingers in the form of a crotchet; but if it cannot be reached by the fingers, it may be drawn down by means of a vectis. The object of these manipulations is to place the chin beneath the arch of the pubes, and thus to convert the case into an ordinary face presentation.

Clifton, Bristol, March 1853.

CAN EXCESS OR A DEPRAVED STATE OF THE GASTRIC AND PANCREATIC JUICES DECOLORIZE THE BILE, AND SIMULATE FUNCTIONAL DERANGEMENT OF THE LIVER?

By CONWAY T. EDWARDS, Esq., Surgeon.

[Read before the Bath and Bristol Branch of the Provincial Medical and Surgical Association, March 24th, 1853.]

THIS is an important question, in reference to the treatment of persons, who, having resided many years in India, return to England suffering from derangement of the whole digestive apparatus. Under a belief that the liver is the one source of all their sufferings, they naturally seek the advice of medical men who have practised in India, and whom they suppose to be more conversant with the nature and treatment of diseases of that organ, than practitioners whose sphere of occupation has been limited to this country.

"I do not" (observed a practitioner in London, to an officer who had seen an extensive service in India), "I do not give it as an opinion that your liver is affected; I state it as a fact." This gentleman had suffered much from dysentery, and from the "heroic" treatment used to subdue it. He had been invalidated for several months, from a casualty produced by a cannon-shot, and had returned to England for his health. The clay-coloured alvine dejections, their want of solidity, and the repeated calls to evacuate the bowels in the day, led him to consult a gentleman whom he had known as a practitioner in India, but who was now established in London.

He was put on a treatment of blue pill, tonics, acids, and alkalies; and with returning summer, came his convalescence. Towards the latter end of last autumn the symptoms reappeared. He consulted a physician nearer home, who pronounced the cause of all these symptoms to be liver.

On this, he communicated with his medical friend in town, who recommended a recurrence to the treatment of the previous spring. But a severe winter was before him; a condition of atmosphere existed inimical to healthy life, and which was incessantly draining the electricity from the system. The treatment which had proved so successful in the spring, failed to produce a single favourable change in the disease. His friend advised him to have his liver examined, and to report the result of the examination.

As he resided in my neighbourhood, he came to me.

There was no tenderness nor fulness in the region of the liver; no tangible hardness of that organ; and no external evidences in the colour of the skin, of the tunica albuginea, or beneath the nails, that any functional, or organic disease of that organ existed. The intestines were filled with flatus;

the motions were loose, frothy, and colourless; and the inclination to pass them frequent, and very urgent. The renal secretion was scanty, and high coloured, and its transit irritated the neck of the bladder; the eyes were bright; the heart's action was healthy; the tongue clean, but rather too red; the function of the skin greatly at fault; the appetite good; but the sleep disturbed and unequal. He dwelt strongly on an intense acidity of the stomach; and believed it to be the cause of his sufferings.

The report was, that there was no organic disease, but functional derangement of the liver, and general debility of the organs of digestion.

The order came to take blue pill until the liver gave evidence of its proper function being restored, and to use the alkaline mixture (which was composed of liquor potassæ and infusion of gentian), as the acidity demanded. The blue pill treatment was continued for nearly two months; and his altered expression, and loss of flesh and spirits, told at once how great had been the failure of the treatment. Not a symptom had been removed, not a suffering mitigated. I advised him again to communicate with his friend; who, in addition to his former prescription, urged the use of the nitro-muriatic acid bath twice a day for two months.

During the whole of this treatment, I never interfered; and as each letter assured the sufferer that the disease must ultimately give way to the plan, he was content to follow it. I think, however, he said to me one day, "You are all wrong about my liver; I begin to doubt if it is liver at all."

An accident at once put an end to the further pursuance of this treatment. It was no less than a dinner party: "I must," said my patient, for so I may now call him, "have these urgent calls to stool arrested. I cannot attempt to visit my friend, with the horrible fear of an urgent call before me!" I could not give him positive assurance that he should not be so troubled; but I deemed it highly probable that he would not, if he could abstain from all food, except bread and chicken, and be content with cold brandy and water, in place of a variety of wines. To this he consented; and I gave him two doses of medicine composed of chalk, chloroform, tincture of opium and cinnamon water; one to be taken directly, and repeated before dinner.

On the following day, he expressed himself greatly indebted for the relief he had experienced from all his symptoms. He had had no stool, had slept better than he had done for many months; and the only troublesome symptom was the immense distension from which he at first suffered, and the consequent dispersion of the flatus. I advised him at once to cease taking the blue pill, and continue the nitro-muriatic acid baths, and those only three times a week; to take the chalk medicine twice a day; to live plainly on roast and boiled meat, eggs, toast, milk, rice, and such simple diet; to walk regularly; and not to give himself a moment's uneasiness about his liver or his stools.

From that hour to this time, he has had no return of his sufferings; the acidity has entirely left him, and the stools are gradually assuming a natural hue.

The question which naturally arises from this case, is this:—To what can the colourless condition of the motions be attributed? If to impaired function, or total arrest of the biliary secretion, are such states compatible with healthy life? Is it possible that an organ of such magnitude as the liver could suffer from arrest of its peculiar function for many months, without producing more serious results than clay-coloured stools? Is it out of the range of probability that the real source of the suffering in this instance may be looked for in an increase of the gastric and pancreatic juices? and that these secretions might be endowed with such an increase of intensity, as to be capable of decolorizing the bile?

It certainly is remarkable, that a long course of judicious treatment failed to produce any beneficial results; and that a treatment which had for its object the neutralization of the acid, and subduing nervous irritability, should be attended in a few days with production of bile of a proper colour.

Bathaston, Bath, March 1853.