

If arrest of development can be accepted in many, if not all cases, of syndactylism, no such probable reason can be assigned for the occurrence of polydactylism, though numerous theories have been framed to account for it. M. Foltz, in the "Journal de Physiologie de Brown Sequard," has broached a theory on the subject of supernumerary thumbs, viz., that originally the thumb was formed of two fingers fused together, and that in the malformation under consideration, the two digits, originally intended to form one, have become separately developed. Another theory is, that supplementary digits arise from two germs which, in some way or other, have got mixed up together. The last theory on the subject is that of Mr. Lavocat,* who, after studying Moraud's observations, on a polydactylic foot with eight toes, presented to the Academy of Sciences in 1770 (known to Teratologists as "le pied de Moraud"), has framed a theory in explanation of the formation of supernumerary fingers. His conclusion is, that in the primordial condition, there are three digits which are normally double, the 1st, 3rd, and 5th; the last by complete duplication, the two former by a peculiar condition of their metatarsal bone, which is bifurcated. In all observations made up to the present time these three toes are precisely those in which the re-duplication has been most frequently noticed. His hypothesis, or theory, or imagination, is that in the abnormal increase of toes, the departure from the normal condition is but an attempt to return to the original type.

In the 8 cases the fingers and toes implicated were:—

- | | | |
|----|-------------|----------|
| 1. | 5th finger | 5th toe. |
| 2. | " | " |
| 3. | " | 2nd toe. |
| 4. | " | 1st toe. |
| 5. | 1st finger. | |
| 6. | " | |
| 7. | " | |
| 8. | " | |

Putting aside all such hypothesis, which, as M. Demarquay says, want the sanction of authority, there is no doubt but that in very many cases the abnormality is hereditary. Thus in one of Dr. Launay's cases it was so. In only one of the 8 cases, No. 2, is it distinctly known to be so, and in this the mother had six fingers and six toes on each side, as also had one of the sisters. In another case, No. 1, there is a presumption of its being hereditary, as one of his sisters had six toes on one foot. In the others no information could be gained on this subject.

It may be transmitted through several generations, examples of which are related by both Manpertuis, and Isidore Geoffroy St. Hilaire. "The Gazette des Hopitaux of 1861" contains a very curious observation, taken from an English work, of a case where polydactylism was transmitted from father to son for five generations.

Hereditariness is much less marked in the case of supernumerary thumbs, and it is the same as regards syndactylism, nevertheless M. Deguise presented to the Societ  de Chirurgie in 1857 a child with syndactylism in whose mother, grandfather, and paternal grandmother, the same malformation existed. In Dr. Launay's second case it was hereditary.

On the 9th case in the series there are but few observations to make. The deformity is exceedingly rare, and it is difficult to imagine any theory that will account for it.

December, 1874.

Dr. Scully's Dispensaries in Yarkand.—News has been received from Yarkand up to the 1st ultimo. Mr. Shaw and Dr. Scully continue to be well-treated. The latter's charitable dispensaries—one in the city, and the other in Elchikhara—are a great success. In the last six weeks over 6,000 patients attended, of whom one-third were women. There were also a good number of in-patients.—*Englishman Telegram.*

* "Gazette des Hopitaux," November 22, 1873.

INDIAN MEDICINAL PLANTS.

PART III.

By Surgeon B. EVERS, *Civil Surgeon, Seoni.*

(Continued from page 67.)

Thenetia-bark.—Bark of the *Thenetia neriifolia*, N. O. Apocynaceæ.

A plant of the West Indies, but now seen in almost every garden in India. It is commonly known as the "exile" or yellow oleander. The antiperiodic properties of this plant were first noticed, it is said, by M. Descourtiz. Drs. Bidie and Shortt's experiments with the drug are confirmatory of that writer's observations. I have made trial both of the tincture (see Waring, p. 138) and the powder of the bark, and can bear testimony to the value of the drug as a febrifuge. One hundred and twenty-one cases of ague were treated with the tincture, and twenty-one with the powder (in doses of $\frac{1}{2}$ to 1 grain three times a day), and in all, the results were most satisfactory. The most obstinate cases have yielded to the drug in from 5 to 8 days; with many of these patients quinine had been previously tried in vain. Administered in the hot stage of an ague-fit, the drug rapidly reduces the force and frequency of the pulse, and appears to hasten on the sweating stage. Great care, however, is necessary in its administration, for it belongs to the class of acro-narcotic poisons. The symptoms that indicate that a sufficiency of the drug has been administered are, dryness and numbness of the tongue, dryness of the throat, and thirst; most of the patients complained of these sensations in from 3 to 5 days. It is a most powerful drug, and not one therefore to be entrusted to every body; but it might be more extensively employed in dispensary practice I think. From the kernels of the seeds "a clear, pale, amber-coloured, slightly viscid, acrid oil" is obtained. The natives recommend the oil as a cathartic, but Dr. Shortt reports that hypercatharsis results from its administration. A case of poisoning by one of these kernels is recorded by Dr. J. Balfour in the Madras Journal of Lit. and Science for 1857.

Clitoria Ternatea.—Seeds of N. O. Leguminosæ.

A very beautiful garden-plant, and commonly known as the mussel-shell creeper. Doctors Shortt and Dymock report that the powder of the roasted seeds acts as a purgative; and they recommend that it be given in combination with the acid tartrate of potash. The dried seeds, powdered and rubbed up with water, form a milky mucilaginous compound of very active purgative properties; much too strong in fact for ordinary purposes. The powder of the roasted seeds is not so active; administered in drachm doses it produces from 4 to 5 copious evacuations; it causes a good deal of griping. Combined with the acid tartrate of potash and ginger, it is a very good substitute for the compound powder of jalap; it is a less nauseous drug than jalap. Mr. Moodeen Sheriff recommends an infusion of the root-bark as a demulcent in irritation of the bladder and urethra; it is also said to act as a diuretic. A syrup of the blue-flowers has been recommended as a colouring agent by Dr. Haines. Ainslie attributes emetic properties to the root, and considers it useful in erup cases. Sir W. O'Shaughnessy, however, states that, although he has employed the root extensively to ascertain its alleged emetic properties, he has never found it act as such. The alcoholic extract however (in doses of from 5 to 10 grains), he remarks, acts as a brisk purgative; "but as griping, tenesmus, and feverishness often result from its use," he does not recommend its administration.

Urginea Indica.—N. O. Liliaceæ.

A sherbet made of the bulbs is considered by the Gonds as almost a specific in enlargement of the spleen. I have given the drug several trials, and cannot say that it has been success-

ful. It certainly possesses diuretic properties, and we can readily understand therefore how it might afford relief in the dropsy attendant upon visceral enlargements. Mr. Moodeen Sheriff states that in doses of from 10 to 20 grains, it is a more powerful diuretic than even the official squill. Dr. Oswald has employed it (in 5 grain doses) as an expectorant in bronchitic affections. The burnt bulb bruised is considered a valuable application in the affection known as 'Ignipeditis.' The drug is said to be largely used by farriers, for horses, in cases of stranguary and fever.

Celastrus Parniculata.—N. O. Celastraceæ.

Oil obtained from seeds of. The oil is a most powerful diaphoretic administered internally; and, applied externally, it acts as a vesicant. The native practitioners obtain the oil by distillation, thus:—A ghurra is buried up to its neck in the ground, and above this is placed another ghurra with its bottom perforated; "the seeds with benzoin, cloves, nutmegs, and mace," are placed in the upper vessel, its mouth is closed, and heat is then applied; the oil now rapidly drains from the upper vessel into the lower one. A considerable quantity of the oil however is wasted in this way, and I have preferred therefore obtaining it by expression; a common oil-mill being used for the purpose. The oil thus obtained possesses more active properties than that obtained by distillation. I have not found it necessary to combine cloves or other aromatics with the pure oil. The oil is that known as "oleum nigrum." It was considered by the late Dr. Herklotz, "a sovereign remedy in beri-beri." I have found it useful in the treatment of dropsy. It is an extremely useful application to rheumatic swellings, and is frequently used for this purpose by the natives. It should not however be applied too often, as vesication results. Sir W. O'Shaughnessy states that this oil "does not differ in any sensible degree from the empyreumatic products of the common fixed oils, containing naphtha and other carburets of hydrogen." "Large quantities would doubtless yield paraffine and creasote." Ainslie informs us that "the bitter and brownish seed is prescribed in conjunction with other ingredients, in cases requiring stomachics, and in those diarrhoeas that are supposed to arise from want of tone in the abdominal viscera." In January last I resolved to give the oil a trial in the treatment of leprosy. Nine patients presented themselves for treatment; I administered the oil (in five minim doses, with mucilage, three times a day) internally, and applied it externally at the same time. We are all aware that with lepers, sexual vigour is either very much impaired, or altogether lost; this condition appears to be connected with the anæsthesia present; *i.e.*, the more complete the anæsthesia, the greater the loss of virile power. After the oil was administered, there appeared to be a partial restoration of sexual vigour, evidenced by erections and nocturnal emissions, and this led me to hope that benefit would accrue to the system generally also. After two months' trial, however, I must confess, that the oil possesses no power to arrest the morbid changes in the skin.

SEONI, C. P., 26th April 1875.

A MIRROR OF HOSPITAL PRACTICE.

MEDICAL COLLEGE HOSPITAL.

CASES TREATED IN THE 1ST SURGEON'S WARDS.

By Surgeon-Major S. B. PARTRIDGE, F.R.C.S.,

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THE following cases, for the notes of which I am indebted to my House Surgeon, Baboo Dhurma Dass Basu, L.M.S., are perhaps of sufficient interest to warrant their insertion in the pages of the *Indian Medical Gazette*.

I.—COMPOUND FRACTURE OF FRONTAL BONE WITH DEPRESSION: RECOVERY.

The first is an example of a rare form of injury, *viz.*, a

bulging inward of a cranial bone with but very trifling accompanying fracture; it is especially remarkable as occurring, not in a mere infant, but in a boy of the comparatively advanced age of 14.

Hurry Doss Mitter, a Hindoo boy, aged 14, was brought into Mr. Partridge's ward in the Medical College Hospital, on the evening of the 2nd August 1874. His history was this:—A short time before his admission, while playing on one of the cars used in Hindoo festivals, a wheel of the machine broke loose upsetting the car, and the boy fell, striking his forehead, with great violence, against one of the bosses with which the wheel was ornamented. Though much frightened and depressed by the injury, he does not seem to have lost consciousness even momentarily; there was considerable bleeding from the wound at the time of the accident, but when admitted the hæmorrhage was trifling, though the condition of nervous depression continued nearly unabated. On examining the wound it was found that there was a compound depressed fracture of the right half of the vertical plate of the frontal bone; the fracture and depression were of a most unusual nature; the fracture was very trifling in degree, and consisted of only a slight fissure at the lower part of the circumference of the depression; the depression itself was a *bulging inwards* of the bone, closely resembling the hollow of the bowl of a spoon, the extreme depression in the centre being about half an inch below the level of the general surface; the area of depression measured about $1\frac{1}{2}$ inch in diameter horizontally and about $1\frac{3}{4}$ inch vertically; the bone was denuded of pericranium, but the soft parts around were not much bruised. The wound was dressed antiseptically, and for a few days ice was constantly applied. He had occasionally slight attacks of feverishness, but never any head symptoms; a small portion of the bone at the upper and inner part of the wound separated by exfoliation, and then the wound healed most satisfactorily with but very little suppuration, leaving a cicatrix about the size of an eight-anna piece—the spoon-shaped depression in the skull remaining as clearly marked as ever at the time of his discharge, which took place on the 2nd November—just three months after his admission.

II.—CARTILAGINOUS TUMOUR OF ULNA: EXCISION: RECOVERY.

The interest of the second case mainly centres in the fact that, by carefully preserving the triangular fibro-cartilage of the wrist, a cartilaginous tumour, involving the whole of the lower third of the ulna, was successfully excised without material injury to the functions of the hand and forearm.

Gidhur, a Hindoo male, aged 24, was admitted with a tumour of the forearm into the Medical College Hospital, under Mr. Partridge, on the 17th March 1875. On enquiry it was ascertained that about a year and a half before admission he first noticed a small swelling on the inner and back part of the right forearm, a little above the wrist-joint; it appeared spontaneously and not as the result of any local injury, and gradually increased in size, soon becoming very painful, the pain being of a burning and lancinating character and confined to the tumour itself. There was no history of hereditary tendency traceable. Blisters and leeches were applied with the view of arresting the growth, but without any effect. On admission, he was found to be a young man of good constitution and cheerful temperament, and free apparently from all other traces of disease. The tumour was about the size of a pomegranate, situated on the inner and back part of the right forearm, and extending upwards for about 3 inches from a point about half an inch above the wrist-joint; it was apparently inseparably blended with the lower third of the ulna, and overlapped, without involving the lower extremity of the radius, interfering considerably with the movement of pronation and supination; in outline it was irregularly ovoid, and the integument covering it, which was freely moveable over its surface, was marked with a broad cicatrix: on handling the tumour, a distinct crackling sensation was perceptible. No traces of glandular enlargement were to be found either near the elbow or in the axilla. For a few days, local sedative applications were ordered to alleviate the pain, but operative interference was for some time postponed in consequence of the prevalence of erysipelas in the hospital wards. On the 1st April the patient was put under the influence of chloroform, a hypodermic injection of morphia having been previously given. The elastic bandage was applied, and the operation commenced with a long incision over the tumour in the line of the axis of the limb; the soft parts were