

	Ulcers.	Gan- grene.		Ulcers.	Gan- grene.
January 1874.	10	1	June 1874	85	2
February "	5	0	July "	52	0
March "	14	0	August "	39	2
April "	58	0	September "	14	0
May "	83	0			

Out of the five cases of gangrene, two died: both were men of enfeebled, broken-down constitutions, with no stamina in them to resist the destructive power of the disease.

The dry earth used is merely the red earth of the place, obtained from the cuttings of the hulls; the earth first of all in its coarse state is dried in the sun or in the air, it is then sifted through muslin or a wire gauze attached to a circular frame; the same kind of earth is used by the lepers also, during ablation, to remove the remains of the wood-oil ointment from their bodies.

PORT BLAIR, 10th October 1874.

[We have received a similar communication from Mr. Assistant Apothecary William Whitby, describing the treatment of ulcers by means of dry earth in Ross Island Hospital. The ulcers described by Mr. Whitby are evidently of a character similar to those above delineated, and due to similar causes. Mr. Whitby has found that the direct application of dry earth impedes the cicatrization of healing ulcers, and a layer of muslin soaked in carbolic oil has been accordingly interposed between the surface of the sore and the earth poultice in such cases. Abscesses and carbuncles are treated with benefit on similar principles. The great advantage of the use of dry earth in such cases appears to consist in its strong deodorising property.—ED., I. M. G.]

INDIAN MEDICINAL PLANTS.

By Surgeon B. EVERS, Civil Surgeon, Seoni.

DURING my several tours on vaccination duty in this district (Seoni, C.P.), what struck me most was the utter helplessness of the people in fever-stricken villages, and their pitiable ignorance of the numerous drug-plants that are to be found, if I might say so, at their very doors. Occasionally I have met with a Gond who could tell me something about the medicinal value of certain plants and herbs; but as a general rule the reply to, "What tree is that?" is, "What do I know; it is some jungle tree!" The neem, the chumpa, chiretta, the vitere negundo and vitere trifolia, the rohan, and other plants too numerous to mention, are to be found probably in and about all the villages in these parts, and might easily, therefore, be employed as remedial agents in the absence of European drugs. In my last tour the stock of quinine I took out with me was soon finished, and when applied to for "fever-medicine," it was rather amusing to note the surprised looks of the villagers when I explained to them how they might utilise these jungle trees, and even the cobwebs found in their huts, as febrifuge medicines. It is heart-breaking to see the poor creatures broken by fever warming themselves in the sunshine; or, as not infrequently happens, lying huddled by a smoky fire in a wretched hovel; and to be told that nothing in the shape of medicine has been taken; and that, as for food, the very sight of it causes sickness. Is it to be wondered at, under these circumstances, that the mortality from malarial fevers is so large? In many instances these people have themselves only to blame, for I have found that even when within easy distance of Government dispensaries they are either too inert or too indifferent to take advantage of these charities.

2. I confess that at first my experiments with indigenous drugs were conducted chiefly with the view of finding some really useful and common antiperiodic; but other drugs attracted my attention, and so step by step I have been lured on, and now I find that a very extensive field of labour lies before all of us. For much that is contained in these papers I am indebted to the valuable works of Roxburgh, Ainslie, Lindley, Waring, Drury, and others; but at the same time I must here state that whatever confirmatory or additional information I have gained, has been obtained by *personal* observation and experiment. I purpose to take the various medicinal plants I have to remark on, in the order in which they have been tried by me.

Michelia champaca.—Nat. Ord., Magnoliaceæ, Champa tree.

I was induced to make trial of the bark of this tree as a febrifuge, from what Waring mentions:—"Further trials with this bark," says he, "appear desirable." I tried a decoction of the bark in ten cases of ague, and from my own experience I can safely state that it is invaluable as a tonic and febrifuge. Dr. H. Lolloi, of Mauritius, employed it successfully "in the treatment of the low intermittent fevers of that island." (For directions regarding its use see Waring's Pharmacopœia of India, p. 6). The root-bark is said to be emmenagogue, but of this I have not yet had proof. "The flowers beaten up with oil are applied to fetid discharges from the nostrils." From information obtained through the Conservator of Forests, C. P., I learn that only one other member, *viz.*, the *Michelia nilagirica*, of this family, is to be found in those parts. This plant is found on the Pachmari hills near the Mahadeo cavern, but in all probability it was planted there. I have not been able to make many trials with this bark, as unfortunately it is not procurable in any considerable quantity in these parts. I leave it to others to test the value of the drug.

Carica Papaya.—N. O. Papayaceæ, Pawpaw-tree.

The milky juice of the unripe fruit has long been known as one of the best vermifuges; and in the West Indies, the seeds powdered are used for the same purpose. The seeds are said to possess emmenagogue properties also. Even the ripe fruit is said to act as an abortifacient, and pregnant women are therefore prohibited eating it. The juice of the pulp (of the ripe fruit I imagine) removes, it is said, freckles caused by exposure to the sun. Browne, in his Natural History of Jamaica, states "that water impregnated with the milky juice of this tree is thought to make all sorts of meat washed in it tender; but eight or ten minutes steeping, it is said, will make it so soft, that it will drop in pieces from the spit, or turn soon to rags in the boiling." Drury says that "this circumstance has been repeatedly confirmed, and moreover that old hogs and old poultry, which are fed upon the leaves and fruit, however tough the meat they afford might otherwise be, are thus rendered perfectly tender and good, if eaten as soon as killed, but that the flesh passes very soon into putridity, nay, the very vapour of the tree serves the purpose; hence, many people suspend the joints of meat, fowls, &c., in the upper part of the tree, in order to prepare them for the table." In Barbadoes, the farmers mix the milky juice with the drinking water for their horses, for the purpose, as they express it, "to break down the blood; and this is a remarkable fact that the effects of this dissolving power in the fruit is not confined to muscular fibre, but acts on the circulating blood." In 1866, when I visited the island of Barbadoes, I found that the unripe fruit pickled was largely used as an article of diet. In this country it is not only eaten pickled, but also carried. I can assure my readers that the unripe fruit makes a very palatable *chijki* (vegetable curry). I have employed the milky juice of the unripe fruit in the treatment of splenic and hepatic enlargements, and with good results. I have treated 60 patients with

this drug, and in 39 instances a cure was effected; in 18 cases the results were not reported; and in 3 cases (of enormously enlarged spleens) relief was afforded. The mode of administration is this:—About a teaspoonful of the juice is collected and mixed thoroughly with an equal quantity of sugar; this mass is divided into three boluses; one to be taken morning, noon and evening. For children, a single drop of the juice, mixed with sugar, is sufficient. The pulp of the unripe fruit (the rind being removed) "mashed" up with hot water might be applied as a poultice over the enlarged gland. On this external application however I do not place much reliance. No ill effects result from the internal administration of the drug. Some of the patients treated complained of a feeling of heat in the stomach, nothing more. When symptoms of gastric or intestinal irritation occur, I have found it necessary to combine opium or hyoscyamus with the juice. The drug appears to me to act as a tonic and deobstruent. My plan for ascertaining that there has been an actual diminution in the size of the enlarged gland, was to mark off with the nitrate of silver the limits of the affected organ when the patient applied for treatment; and after about a fortnight or month, percuss and mark off again in the same way. In very bad cases, I have seen a decrease of from half an inch to an inch in perpendicular dulness. Patients have told me again and again that they felt considerably lighter in the side; and that (ab khana hazm hota) their digestion was now good. I believe that the drug is most active in cases where the stage of ague-cake, *i.e.*, the genuine amyloid spleen, has not yet been attained—in fact, when the deposit in the gland is still albuminoid. (See my paper on Ague and its sequelæ in *Indian Medical Gazette* for May and June 1871). It acts much more rapidly than the hydrochlorate of ammonia, the bromide of potassium, or the external application of the bin-iodide of mercury ointment. From 20 to 25 days is the longest time that a patient is generally kept under treatment. A nutritious and liberal diet is also an essential adjunct in these cases.

Acorus calamus.—N. O. Arrideæ, Sweet-flag.

Ainslie says that "it is a very favourite medicine of the Indian practitioners, and is reckoned so valuable in the indigestion, stomach-aches, and bowel affections of children that there is a penalty incurred by any druggist who will not open his door in the middle of the night and sell it if demanded." A bath made of the infusion of the root "is regarded as an effectual remedy for epilepsy in children." "Shroder informs us that it possesses virtues in obstructions of the menses, spleen, and liver." The Egyptians regard it as a valuable aromatic and stomachic. The Turks prepare a confection of the root, and employ it "as a preventative against contagion." "European practitioners have considered the root as tonic and aromatic; and occasionally prescribe it in cases of intermittent fever and dyspepsia." Dr. A. T. Thompson recommends it as an antiperiodic; and Dr. Æ. Ross reports that it is an excellent stimulant and diaphoretic; he looks upon it "as most serviceable in atonic and choleraic diarrhœa." As an insecticide, particularly with reference to fleas, I have always found it very efficacious; but for this purpose, the root must be obtained fresh.

Last year the chief cause of mortality among the house patients of the Seoni Main Dispensary was dysentery; the jail population also suffered very much from the same disease. The disease is most prevalent about the middle of the rainy season, that is, during the months of July and August. The disturbance probably of the water supply, especially when this is derived from tanks and streams, and the dampness of the season are, in some measure I think, accountable for the appearance of the disease. In many of these cases, a malarial taint could be detected. Ipecacuanha does not, I regret to say, always succeed in these cases. There were no less than 69

cases of dysentery treated in the Main Dispensary during the months of July and August. I found a decoction of the rhizome of the acorus calamus very effectual in arresting the flux of blood, especially in the dysentery of children. The decoction is prepared thus:—

Of the bruised rhizome	...	2 ounces,
Coriander seed	...	1 drachm,
Blackpepper	...	½ drachm,
Water	...	1 pint,

boil down to 12 ounces and set aside to cool. The dose for an adult is an ounce three times daily; for a child 1 to 3 drachms, sweetened with sugar, two or three times a day. Astringent extracts or quinine might be added if necessary. The decoction is not only useful in dysentery and diarrhœa, but also in the bronchitic affections of children. I have often taken it myself when suffering from a bad cold in the chest. I think the drug is one well worthy of more extended trial.

Cochlospermum gossypium, N. O. Ternstroemiaceæ. The pods contain a silk-cottony substance that might be used for stuffing pillows, &c. The bark has a faint aromatic odour, and yields on scarification a resinous exudation resembling myrrh. The natives use the branches of this tree for making torches. This plant is said like the *sterculia urens* to yield a gum analogous to tragacanth. I have employed a decoction of the bark as a tonic and demulcent in cases of gonorrhœa. Of 13 cases treated with the decoction, 9 were decidedly cures, and in 4 the result was not known. The patients stated that after taking this medicine the scalding soon ceased. I found it necessary however to combine the sulphate or acetate of zinc in quarter grain doses, to arrest altogether the discharge. The medicinal value of this plant is not, in my opinion, worth much.

SOME NOTES ON SKIN GRAFTING.

By Surgeon C. SIBTHORPE, 20th M. N. I., Banda.

DURING the past year and a half I have had a good many opportunities of putting this mode of treatment into practice, and believe that it is one of the most powerful means we have of securing a rapid cure and firm cicatrix in ulcers.

Mode of operation.—A small piece of the skin was taken up by means of an ordinary dressing forceps, and with a sharp scalpel it was cut, or rather shaved off, care being taken, if possible, to avoid drawing blood. The piece removed was never more than an eighth of an inch in diameter, and was generally divided into two or more smaller portions upon the thumb nail, each division being placed separately at distances varying with the size of the ulcer, and gently pressed upon the granulations.

The ulcer was then covered with guttapercha tissue, dipped in carbolic oil (1 to 40), which was kept in its place by a lightly applied bandage, and a little cotton to keep the guttapercha pressing the grafts against the granulations. The ulcers should be healthy, or at least only indolent, for if otherwise there is scarcely any chance of success: the class which appear to do best are those which are healing slowly from the edges; the next are those in which cicatrization has ceased, and the surface become indolent from want of power.

If an ulcer is very large, several pieces should be transplanted, but it is generally better to wait and observe the result of transplanting one or two pieces. If successful, there would be little difficulty found in persuading the patient to submit to a second operation. It is advisable not to remove the guttapercha for the first three or four days, when care should be taken not to disturb the surface of the sore. A fresh piece of guttapercha, oiled as before, should be re-applied and retained in its place by means of a light bandage so arranged as to permit of all discharges flowing freely away.

The advantages of guttapercha tissue as a covering are many; it is non-irritating and smooth; being semi-transparent, the state of the ulcer can be seen without removing it.