

mencing only two finger-breadths from the internal edge of the tibia, finding the edge of the gastrocnemius, and pushing it aside. The fibres of the soleus are then carefully divided in the direction of the artery. There is usually a deep aponeurotic tendon inclosed within the fibres of the soleus, having muscular fibres inserted on its anterior and posterior surfaces. When this is reached it serves as a warning to the operator that the artery is not far off. By separating the edges of the incision the vessel may be found, even if not exactly in the direction of the cut. It is very rarely tied here.

Below, where the artery becomes more superficial, there is no difficulty in finding it. In operating anywhere on the inner side of the leg the internal saphenous vein must be avoided. The artery is accompanied throughout by two veins, with frequent cross anastomoses, and by the posterior tibial nerve, which is at first on its inner side, but crosses over to the outer side, below where the peroneal artery is given off. A section of the nerve paralyzes the plantar muscles.

The deep layer of muscles is constituted by the tibialis posticus, the flexor communis, the flexor longus hallucis, and the popliteus. The latter muscle is confined to the upper part of the leg, arising by a rounded tendon from the groove above the external condyle of the femur, and passing obliquely inward to the tibia. It is believed to represent the pronator radii teres of the arm, and, like that muscle, assists in rotating the segment and in bending the joint. All the other muscles terminate in tendons which pass down behind the inner malleolus into the foot. Besides a considerable origin from the intermuscular septum, the tibialis posticus and flexor communis arise from the tibia; the flexor longus hallucis from the fibula. As the tendons pass downward those of the flexor communis and the tibialis posticus twist around each other, interchanging places, so that at the ankle the latter is nearest the bone. (See article *Foot*.)

Within the fibres of the flexor longus hallucis the peroneal artery runs close to the fibula, and is therefore often wounded when that bone is fractured. The artery may be of larger size than the posterior tibial, and may take the place of the anterior tibial. At its upper part it is so surrounded by fibrous structures that aneurism of it is extremely rare. It is also so well protected by the fibula that it is rarely wounded. It is still more difficult to reach for ligation than the posterior tibial, and this is not practically done except as a surgical curiosity. When effected, it is by detaching the fibular origin of the soleus and raising the flexor longus hallucis.

Frank Baker.

**LEGUMINOSÆ.**—(*The Bean Family*). As here considered, this family includes the three sub-families *Papilionaceae*, *Cesalpiniaceae*, and *Mimosaceae*, regarded by many botanists, and probably correctly, as distinct families. It comprises nearly 450 genera and about 6,000 species, distributed through all except very cold regions and exceedingly numerous and abundant in most tropical districts. When its general structure, chemistry, physiology, and adaptability to environment are considered, it appears to stand at the head of the vegetable kingdom. Its economic importance is of the greatest. It contributes some of the most highly prized and durable timbers, especially for cabinet purposes. Many species are so rich in tannin as to be valuable tanning agents and very many of its dye-stuffs, like logwood and indigo, have been utilized. *Acacia*, *Senegal*, *Mesquit*, and *Tragacanth* gums are elsewhere described in this work. Peanut oil is the type of a number of useful fixed oils. Tonka is a valuable perfuming and flavoring agent. Tamarinds, ingas, and other fleshy fruits are important edible products. Most of the richly albuminous fodders, like clover, alfalfa, lupines, and vetches, are yielded by this family, especially by the first-named sub-family, while peas, beans, lentils, peanuts, soja and fenugreek, in the same group, are equally important as albuminous human foods. Medicinally, the Calabar bean, senna, broom, liquorice, jquirity, araroba, Jamaica dogwood,

balsams of Peru and tolu, copaiba and erythrophleum are mere illustrations of a vast number, and especially of local employment. *Ononis spinosa* L. and other species of *Ononis*, household diuretics, and *Monssena* (*Abizua anthelmintica* [Baill.] Courd.), an anthelmintic bark treated in the preceding edition of this work, may also be mentioned.

Poisonous species are very numerous. Many of the poisonous constituents are glucosides or alkaloids, readily isolated, their activities not at all uniform. In other cases, as of abrus and locust, they are albuminoids, very difficult of isolation. In some noted cases, as that of the loco-weed, they are absolutely elusive. Even in such edible seeds as the pea and the bean there exists some unknown principle which renders them injurious when used to excess, and which causes inflammations and loss of the cutaneous appendages, even of the hoofs. This effect is very noticeable in the case of *Leucaena* and results in a well-marked deformity in the horse, the "cigar-tail," characterized by the complete loss of the hair of the tail. This family is capable of further very extensive exploitation in the interest of materia medica.

Henry H. Rusby.

**LEMON.**—(See also **CITRUS**). The lemon is a large, evergreen, fragrant shrub or small tree, two or three metres or more in height, with numerous straggling grayish branches and green or reddish spiny twigs. The scattering leaves are, like those of the orange, articulated to the petiole; they are ovate, rather narrow, pointed, slightly serrate, the petioles not at all, or very narrowly, winged. The deliciously sweet flowers have the same structure as those of the orange, but are rose-colored or purplish externally. The juice of the lemon, as commonly known, is excessively sour, but there are numerous varieties which are deliciously sweet. The peel and its volatile oil and the juice are official. The former, for medicinal use, is pared off with a knife in thin ribbons, so as to include but little more than the oleiferous zone. It has a fragrant, pleasant odor, and a bitterish, aromatic taste. Lemon juice is prepared by simple expression of the pulp, and straining if there are any evident shreds of the pulp or partitions in it, as these will make it bitter upon standing. It is a slightly turbid, yellow, nearly odorless, pleasantly but intensely acid liquid, of spec. grav. about 1.030. Besides these, which are prepared extemporaneously from commercial lemons, the oil of lemon (*Oleum Limonis*, U. S. P., B. P., etc.), imported from the south of Europe, is also in extensive use as an elegant and popular flavor. This oil, like that of orange peel, is to be obtained from the fresh peel by expression.

**COMPOSITION.**—Lemons contain three distinct leading constituents, in as many distinct anatomical parts of the fruit: The *essential oil*, in a zone of large spherical glands situated just beneath the outer surface of the peel. It should not be distilled, but separated from the rinds by the same processes as are used for the oils of orange and bergamot—that is, by in some way rupturing the vesicles and collecting it mechanically. It is a pale-yellow, fragrant liquid, of an aromatic, bitterish taste and a neutral reaction; soluble in two parts of common alcohol, and in one or two thousand parts of water. It keeps badly, becoming thicker by age, and acquiring a disagreeable turpentine-like odor. The white spongy part of the peel and the partitions have a bitterish taste, due to the crystalline neutral substance *hesperidin*, common also to the other fruits of the genus. It is not used in medicine. The pulp owes its acidity to five or six per cent. of, mostly free, *citric acid* (of which lemons, limes, and sour oranges are the principal sources), and to a little *malic acid*.

**USES.**—Lemons are mostly used as an agreeable and wholesome flavor for food and drink. Their medicinal value is slight, and consists in their antiscorbutic quality, for which the juice (or lime juice) is carried on shipboard, and, on long voyages, is meted out to sailors and passengers. The introduction, however, of steam navigation,

by making voyages short, and of canned meats and vegetables for ocean use, has nearly obliterated scurvy. As a grateful refrigerant drink in fevers, and especially in rheumatism, lemonade has no equal. The oil has the properties of the aromatic oils in general, but is used only as a flavor.

**ADMINISTRATION.**—The following preparations (not including citric acid or the citrates) are official: Spirit of Lemon (*Spiritus Limonis*, U. S. P., the Essence of Lemon of the kitchen) contains six parts of oil of lemon, four of lemon peel, and enough alcohol to make a hundred; macerate and filter. The Syrup of Lemon (*Syrupus Limonis*, U. S. P.) is made of: lemon juice, 40 parts; fresh lemon peel, 2 parts; sugar, 60 parts; and water enough to make 100 parts. Boil the juice, add the peel, and, when cold, filter, adding water enough to make 40 parts; finally put in and dissolve the sugar. The Syrup of Citric Acid (*Syrupus Acidi Citrici*, U. S. P.) keeps better and is almost invariably substituted for this by the apothecaries. It contains: Citric acid, 8 parts; water, 8 parts; spirit of lemon, 4 parts; syrup, 980 parts; and is a close imitation of the other. The mixture of citrate of potassium (neutral mixture, *Mistura Potassii Citricis*, U. S. P., an old fever mixture not much used at present) is lemon juice neutralized by bicarbonate of potash. Lemon juice is frequently added to the alkaline carbonates to form an effervescent draught.

W. P. Bolles.

**LEMON GRASS.** See *Andropogon*.

**LEMON SPRINGS.**—Moore County, North Carolina.

POST-OFFICE.—Lemon Springs.

**ACCESS.**—Via Seaboard Air Line Railroad to Lemon Springs Station, thence a little over two miles to springs. These springs are named for the former owner, the late Dr. M. Lemon. They are located in a fine, healthy region, about 500 feet above the sea level. The hotel was destroyed by fire a few years since, and the resort is suffering from undue neglect. It is said that the place could be made one of great attractiveness, both for summer and for winter visitors. The waters of Spring No. 1 were analyzed by Professor Ledoux, at that time the State chemist, who detected salts of iron, aluminium, magnesium, and other ingredients in nearly the same proportion as exist in the Buffalo lithia waters of Virginia.

James K. Crook.

**LENIGALLOL**—pyrogallol tri-acetate—is a white crystalline powder, insoluble in water and claimed to be non-poisonous. In contact with inflamed skin it slowly liberates pyrogallallic acid, and where the epidermis is lost the change is quite rapid. It is not affected by the healthy skin, nor does it stain the clothing. With zinc ointment it tends to produce a dark coloration from slight decomposition. Kromayer recommends it in chronic eczema, at first applying lenigallol 20 parts and zinc ointment 80 parts, and later, if necessary, lenigallol 10 and oil of cade 5, or lenigallol 10, oil of cade 10, precipitated sulphur 20, green soap 5, and zinc ointment 150. Rau uses it in chronic eczema after thorough washing with potash soap. He found it useless in acute eczema. Good results are reported in psoriasis and other skin diseases. It is claimed to be unirritating even in fifty-per-cent. ointment.

W. A. Bastedo.

**LENIROBIN**—the tetra-acetate of chrysarobin—is considered by Kromayer a fair and unirritating substitute for chrysarobin in the milder types of skin disease. Rau uses it in ten-per-cent. chloroform solution or with traumaticin, reporting two cures of keratosis and eighteen of chronic tylosis. It is painful to rhagades.

W. A. Bastedo.

**LENTIGO.**—(Synonyms: Freckles, Ephelis, Ephelid; Fr., *Taches de rousseur*; Sp., *Pecas*.)

Lentigo is usually described as an eruption of multiple circumscribed, irregular, flat spots, varying in size from

a pin point to that of a lentil, in color running from light greenish-yellow to dark brown or blackish, appearing on that part of the cutaneous surface most exposed to the inclemencies of the weather; the variety that appears on the non-exposed surface is commonly termed "cold freckle." As a rule the lesions are discrete, but sometimes they are so numerous and close together that they seem to run into each other and thus form a patch. Anatomically freckles, according to Cohn, consist of a circumscribed accumulation of pigment in the basal layer of cells of the rete Malpighi and in the papillary layer of the skin.

**ETIOLOGY.**—We may say that as a rule every one is subject to freckles, but the brunette type is unquestionably less so than the blonde, and those with so-called red hair and delicate skins are the ones most prone to suffer from this disfigurement; nevertheless I have frequently seen mulattoes of both sexes whose faces were literally covered with freckles. At the same time I have observed that the proneness to freckles in the offspring seems to increase in proportion as the white race preponderates in the ancestry of the hybrid. Some families seem more liable to freckle than others, although the exposure to sun, moisture, sea air, etc., may have been the same for all the cases. While it is true, therefore, that the chemically active rays of the sun are the most potent factor in producing this disfigurement, we must conclude that there are other factors whose nature is at present unknown to us. These factors are those responsible for freckles appearing on the least exposed portions of the body, as the buttocks, thighs, genital organs, etc., and for those appearing in people who are practically never exposed to inclemencies of weather.

**Varieties.**—To the practitioner, the most interesting form of freckle is the one that he is most liable to be called upon to treat, namely, the variety termed lentigo æstivale, or summer freckle. This is the eruption that appears on the faces of city-bred women and children of fair, tender skin, during the summer months, while temporarily residing at the seashore or in the country. Happily, this is the form that is most liable to yield to treatment, and it also has a tendency to disappear spontaneously during the winter months.

The other kind, which we may call true lentigo, is far more difficult to deal with. It may be a racial or family characteristic. This variety appears about the seventh year, persists throughout young adult life, and begins to fade about the thirtieth year. Another variety, one that has a tendency to appear in old age, may be regarded as one of the manifestations of senile atrophy of the skin.

**SYMPTOMS.**—The eruption of freckles is not accompanied by any subjective or objective symptoms other than the appearance of the lesions. The various symptoms recorded by certain writers as observed in a few cases are in my opinion to be regarded as mere coincidences.

**DIAGNOSIS** of lentigo is easy, if the situation and shape of the lesions and the history of the case are borne in mind.

**PROGNOSIS.**—As to the summer variety this is very good, for the lesions tend to fade away during the winter, but they will reappear as soon as the patient is again subjected to the original cause that produced them.

**TREATMENT.**—From the above it will be seen that the treatment of this trouble is sometimes very satisfactory, while again it may be quite the reverse. Almost all treatment is directed, or has been directed thus far, to a destruction of the epithelium. Among the means directed to this end may be mentioned lotions and salves containing corrosive sublimate or oil of cade; the application of pure carbolic acid to each individual freckle, and electrolysis. Unna employs with good results preparations containing hydrogen peroxide and oxychloride of bismuth. As a prophylactic measure women should wear heavy red or light brown veils while at the seashore.

N. J. Ponce de Léon.



**LEPROSY.**—(Synonyms: Gr., *λεπρα* (from root meaning scaly); Lat., *lepra* (in classical Lat., *lepræ*), *elephantiasis Græcorum*, *satyriasis*, *leontiasis*, *lepra Arabum*; Fr., *lèpre*; Ital., *lebbra*; Ger., *Aussatz*; Norweg., *spedalskhet*.)  
**DEFINITION.**—Leprosy is a chronic, contagious, and infectious disease, produced by the bacillus *lepræ*; characterized by the formation of new growths in the skin, peripheral nerves, and internal viscera, producing various deformities and mutilations of the human economy, and usually ending fatally.

**SYMPTOMS.**—Clinically, leprosy occurs in two quite distinct forms. These were termed by Danielsen and



FIG. 3188.—Tubercular Leprosy. (Dr. James Nevins Hyde's photograph of a Leper in the Sandwich Islands.)

Boeck<sup>1</sup> the "nodular" and the "anæsthetic." The terms "*lepra tuberosa*" and "*lepra maculo-anæsthetica*," as adopted by Hansen and Looft,<sup>2</sup> seem more acceptable, as they more nearly express the condition. While, as a rule, each affection runs its special course and is marked by symptoms so entirely different from those belonging to the other as to appear as a distinct disease, yet some cases exhibit symptoms which are common to both forms, and in these the relationship is evident. They have a common etiological factor, the bacillus *lepræ*, which, however, is in a different anatomical location, and varies as to numbers in the two forms. As in the case of other contagious and infectious diseases, the clinical history may be divided into stages.

The period of incubation has been carefully studied by competent observers, and cannot be said to have a definite length. It is estimated to extend over a period of from a few weeks to many years. Before the eruptive and characteristic stage develops, various prodromal symptoms such as might precede any infectious disease occur. Among these may be mentioned fever, chilliness, malaise, headache, mental depression, drowsiness, pains in the

limbs, and various anomalies of the motor and sensory apparatus, especially in the limbs. Those preceding the maculo-anæsthetic form are more variable, and are chiefly symptoms which naturally arise from nerve involvement, such as pruritus, formication, pain, hyperæsthesia, etc. These may be slight or very severe, and may last for only a few weeks or perhaps for many years.

**Lepra Tuberosa.**—In the skin this type of leprosy appears first as a macular eruption, of varying persistence, which may come and go, but in which finally the skin becomes infiltrated with characteristic tubercles. Their commonest location is on the forehead, cheeks, nose, chin, and ears, the forearms and the thighs. Unna<sup>3</sup> says that the lobe of the ear is a favorite and early site. The macules are well defined, and are round, oval, or irregular in shape; in size they range from 1 to 10 cm. or more in diameter. Their color, depending on the race of the patient and the age of the lesion, varies from a light-red to a purplish or bronze shade. They may appear slightly elevated or infiltrated, or quite smooth and shiny, and somewhat hyperæsthetic. Sooner or later these patches become permanent and infiltrated with tubercles which are pea-sized, yellowish or reddish-brown, and which enlarge more or less rapidly, some of them becoming as large as a walnut or larger. The development of these is not limited to the site of the macules, for some appear on apparently normal skin, and their efflorescence is preceded by febrile symptoms, more or less severe; nor do they appear simultaneously, but rather in successive groups, each new efflorescence being preceded by febrile symptoms, and perhaps epistaxis. Although the eruption may occur on any part of the cutaneous surface, it is uncommon on the palms and soles, and is rarely found on the scalp and glans penis. In typical cases of tubercular leprosy, the face presents a characteristic appearance, so much so that the disease has been termed "leontiasis" (or lion-face) from the fancied resemblance which the distorted features suggest. The eyebrows are practically always the seat of nodules in greater or less abundance. The brow appears thickened, and when the nodules are well formed the hairs are lost. The facial appearance of a leper who has the tubercular form of the disease, is well described by Thin,<sup>4</sup> as follows: "The thickened skin of the forehead, studded with unequal tubercular masses, and marked horizontal furrows; the tumid, greasy cheeks, uneven with tubercles; the everted lips; the nose thickened, widened, flattened, and crushed like a negro's; and the projecting nodular ears, present an appearance which distinguishes leprosy from all other diseases, and which requires to be seen once to be always recognized." At times, by confluence of individual tubercles, large plaques are formed. (*Lépromes en nappe*, Leloir, which are dark in color and which desquamate slightly.) They are inert, lasting sometimes for years unchanged. They may be the seat of pruritus, or the sensation may become less acute; the hair falls in the involved regions and they may finally ulcerate. These large plaques usually occur on the limbs and, according to Danielsen and Boeck,<sup>1</sup> indicate an unusually chronic case. The tubercles may undergo ulceration, and discharge a yellowish-brown, viscid fluid, which may form crusts. Some of these ul-

cers soon heal, especially under appropriate treatment, while others extend deeply, becoming gangrenous and destroying much tissue. Bones are laid bare; tendons, ligaments, joints, and even whole members, such as fingers and toes, are destroyed. Usually at this extreme stage symptoms of the maculo-anæsthetic type are also present. During the course of the disease, the glands of the axilla, groin, neck, and throat become enlarged. In the latter situation, this adenopathy may interfere with breathing and swallowing. Eventually, the glands soften and break down, forming fistulous tracts discharging large quantities of material. At times, without apparent reason, the disease remains stationary for long periods, then suffers an exacerbation. Intercurrent diseases, such as variola, pleurisy, and pneumonia, may cause it to disappear temporarily.

Lepra occurring in children retards the physical growth and the development of the sexual organs, arresting the functions of the latter. Menstruation may be delayed or entirely inhibited. When the disease occurs after puberty, the menopause may be prematurely brought about, and the procreative faculty lessened or lost. Bracken,<sup>10</sup> in a report of cases in Minnesota, states that twenty-one out of thirty-four patients were married, to twenty of whom seventy-eight children were born. Alopecia, especially of the eyebrows and eyelashes, usually occurs, but the scalp is rarely attacked. Occasionally the nutrition of the nails is disturbed, as evidenced by thinning, thickening, or other deformity. The secretions of the sebaceous and coil glands are early increased, but later diminished or entirely lost in the affected area. Comparatively early in the disease, small, flattish tubercles form on the conjunctiva and cornea, extending to and involving the iris, and gradually filling the anterior chamber. The eyeball swells and the lids cannot be closed. There is pain, and the lachrymal secretion is increased. Later, the mass softens and contracts, the secretion lessens, pain stops, and the lids can again be closed (Danielsen and Boeck<sup>1</sup>). Other and more chronic processes occur in the eye during the course of the disease. According to Hillis,<sup>5</sup> throat symptoms occur during the febrile attack. The same author states further that patches having raised crescentic edges, situated at the back of the pharynx and on the roof of the mouth, the back of the throat and the uvula, which are uniformly red and congested, are pathognomonic of leprosy. Later, the epiglottis, vocal cords, and other structures in the larynx become studded with tubercles, as does also the nasal septum; and when ulceration occurs the cartilage and bony framework of the nose are destroyed, producing the characteristic deformity. Morrow believes that the earliest manifestations of leprosy in most cases are located in the mucous membrane of the pharynx and upper air passages, as shown by alteration in the voice, rhinitis, increased nasal and salivary secretions, and sometimes epistaxis.

Danielsen and Boeck<sup>1</sup> have described an acute form of leprosy similar to acute tuberculosis. It is manifested by a continuous fever of about twelve days' duration, when, with a sudden efflorescence, raised, shiny, bluish spots appear over nearly the whole body. These rapidly increase in volume and hardness, become confluent, and progress as far in a few weeks as does the ordinary form in years. With the appearance of the eruption, the constitutional symptoms abate, and after the tubercles have softened the affection becomes chronic. In any case in which the cutaneous exanthem fails to appear, the patient usually dies of pneumonia, pleurisy, or meningitis in the course of a few days.

The physical condition which is the ultimate lot of the unfortunate victim of tubercular leprosy cannot be equalled in any other disease. Leloir<sup>6</sup> graphically describes it thus: "If the patient does not die of some intermittent disease or special complication, the unhappy leper becomes a terrible object to look upon. His deformed, leonine face is covered with tubercles, ulcers, cicatrices, and crusts. His sunken, disfigured nose is reduced to a stump. His respiration is wheezing and difficult. A sanious, stinking fluid, which thickens into crusts, pours from

his nostrils. The nasal mucous membrane is completely covered with ulcerations. A part of the cartilaginous and bony framework is carious. The mouth, throat, and larynx are mutilated, deformed, and covered with ulcerated tubercles. The patient breathes with the greatest difficulty, and is threatened with frequent fits of suffocation, which interrupt his sleep. He has lost his voice; his eyes are destroyed; and not only his sight, but his senses of smell and taste have completely gone. Of the five senses, hearing alone is usually preserved. Owing to the thickened and pachydermic state of the skin of the limbs, which gives to them the appearance of elephantiasis, and to the presence of ulcerating tubercles, crusts, and cicatrices, the sense of touch is abolished. Usually at this time the peripheral nerves are involved, so that the symptoms of both the tuberosus and the anæsthetic type of leprosy are present. The patient suffers excruciating pains in the limbs, and even in the face, while the ravages of the disease in his legs render walking difficult and even impossible. From fistulous openings in the hypertrophied inguinal and cervical glands pus flows abundantly. In certain cases the abdomen is increased in size on account of involvement of the liver, spleen, and mesenteric glands. With these visceral lesions, the appetite is irregular or lost. There are pains in the stomach, diarrhoea, bronchial and pulmonary lesions, intermittent febrile attacks, and a hectic state. The peculiar smell, recalling that of the dissecting-room, mixed with the odor of goose's feathers or of a fresh corpse, was recognized but badly described by authors in the Middle Ages, who compared it to that of a male goat. This is the complexus of symptoms which the patient presents, unless some fatal complication has come to his relief. In this light one can understand how, in the ancient poem of Job, leprosy is called 'the eldest daughter of Death.' Nevertheless, in spite of his condition, the unhappy leper, although in great prostration, commonly preserves his intelligence unaffected to the end. I have been struck," continues Leloir, "with the calm stoicism with which the Norwegian lepers supported their misfortune, and with the indifference or even gayety of the lepers in Italy and other countries, and with the care which they gave to their toilet. I have never seen a leper ask for death, and I do not know of an instance of suicide among these patients, who observe with the greatest resignation the slow and progressive decomposition of their bodies."

**Lepra Maculo-anæsthetica.**—In this variety, the bacilli are located chiefly in the neuroglia of the peripheral nerves, and consequently the symptoms exhibited in the part supplied by the affected nerves are those which would naturally follow their irritation, compression, or degeneration. Chief among these are the development of spots or macules, bullæ, muscular atrophy, anæsthesia, motor paralysis, and finally mutilation by loss of parts. There is no regular sequence observed in the evolution of these symptoms. Usually, however, the maculæ and bullæ are among the earliest manifestations, but their appearance may be delayed for years.

The course of this form of the disease is exceedingly chronic, its average duration being estimated at about eighteen years. The appearance of the spots is usually preceded by anomalies of sensation, such as formication, a sensation of burning or stinging, or pruritus. The size of the lesions varies from that of a fifty-cent piece to that of the palm or larger. By peripheral extension and coalescence, large, irregular areas, having a curved contour, may be produced. At first they are reddish in color, changing with age to yellowish or brown, or even darker shades, when they tend to become slightly elevated and to desquamate. Their centres become depigmented and anæsthetic, while the border may be hyperpigmented and hyperæsthetic. Their commonest seats are usually considered to be the back, shoulders, face, arms (especially about the elbows), the nates, and around the knees. When the spots are fully developed, they may cover very large areas of the body surface. In the anæsthetic portion, and at times extending beyond it, the production of