both cases usually persisting for some weeks after its appearance.

Reference is made to a tumid and engorged, very rarely indurated, often softish condition of the chain of lymphatic glands extending along the posterior border of the sterno-cleido-mastoid muscle, or of the post-auricular, suboccipital, epitrochlear, or submaxillary glands. These glands, usually so small as to be scarcely recognizable by the finger passed over the skin, may increase till they are of the size of a bean or a small nut, and are even conspicuous to the eye of the observer. The two glands beneath the occiput are often very significantly enlarged in this way, irrespective of the occurrence of any lesion upon the scalp or vertex. This general engorgement of certain special lymphatic ganglia is often symmetrical; the glands, for example, behind one ear, or over the mastoid process, corresponding in size and firmness to those of the other side of the body. Occasionally this engorgement of glands in special regions of the body is proportioned in extent to the syphilodermata developed in continuous regions, of the scalp, for example, where the suboccipital ganglia are affected.

(*c*) *State of the Blood.*—Syphilis, though popularly known as a "blood disease," is actually one in which but few alterations can be demonstrated in the blood. Investigators have, by repeatedly counting the number of red blood corpuscles, determined that these elements, in certain stages of syphilis, are reduced from fourteen to fifty per cent. in number. With this decrease in the red blood corpuscles, there is relative increase in the number of leucocytes. This change is characteristic of the early stage only; it is especially noticeable just prior to the evolution of the first syphiloderm. In the period under discussion the micro-organisms which produce the disease are multiplying, and by the avenues of all the vascular channels gaining access to distant parts of the body; even to regions where later a gummatous product may form.

The chloro-anæmia which is the result of systemic intoxication in syphilis occurs from time to time in most well-marked cases of the disease. It may be an early or late symptom, and in grave and so-called galloping cases is throughout a marked feature of the malady. In tertiary and ulcerative types of syphilis, it may depend more upon the local symptoms than upon the general condition, and, in some cases, is without question a resultant of the long-continued inroads of the poison upon the general health. Justus has shown that in the early stages of syphilis a decrease of from ten to twenty per cent. occurs in the hæmoglobin blood-content twenty-four hours after mercurial inunction of the skin.

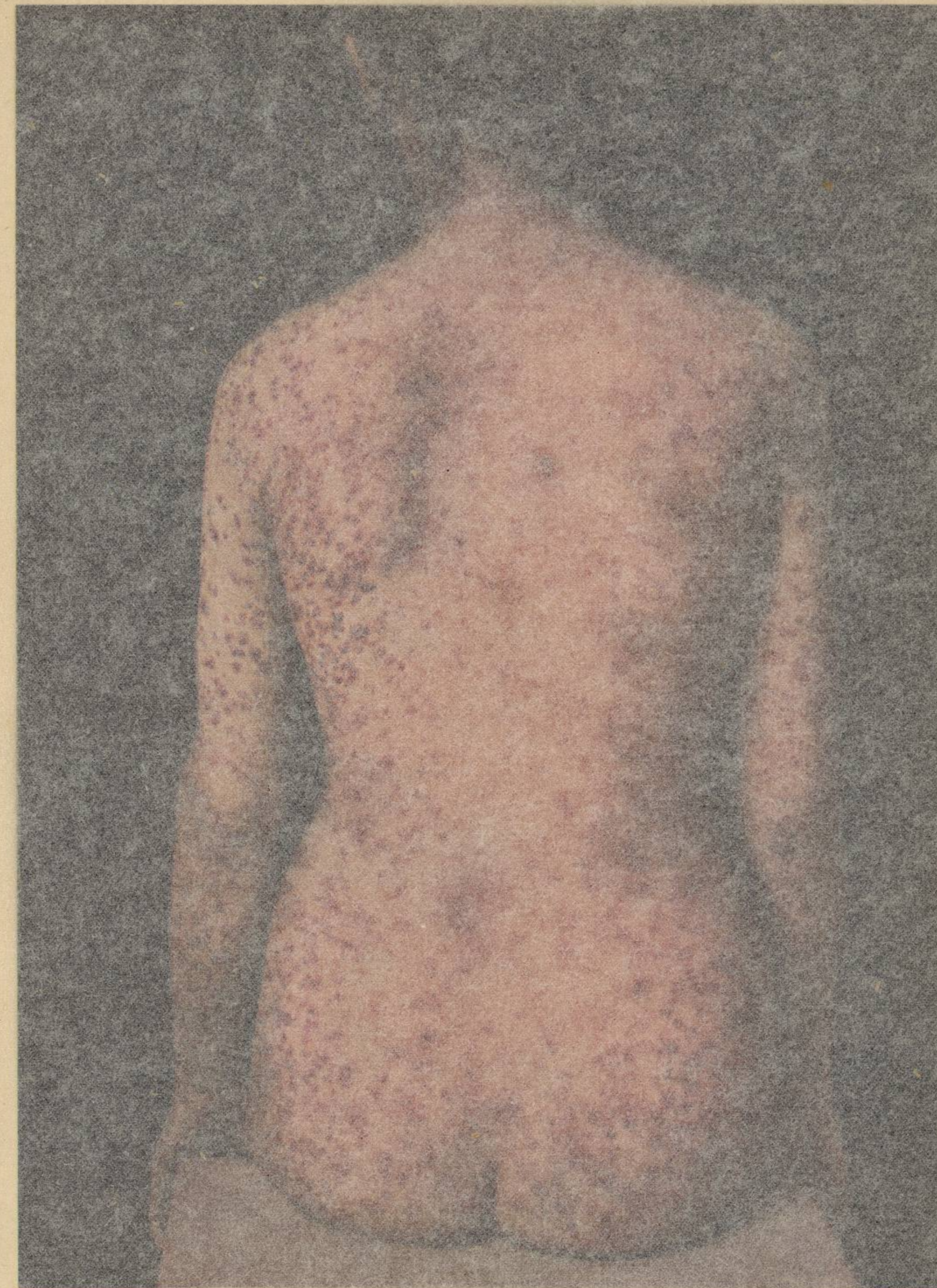
This chloro-anæmic, anæmic, cachectic, or asthenic state is often conspicuous in the invasion period now under consideration, with mild or grave symptoms, particularly in persons of a naturally weak constitution, or in those prostrated by other previous disorders. Often, just before the appearance of the earliest syphiloderm the patient exhibits a pallor of the face, accompanied by a discolored, muddy, leaden, or saffron-like tint of the skin. With this there may be emaciation, weakness, and vague rheumatoid pains in different parts of the body (substernal, plantar, temporal, tibial, etc.). There is anorexia, and the patient will often describe his condition as one of "biliousness." In exceptional cases there is decided icterus, with yellowish conjunctivæ and urine of high specific gravity and heightened color. With this condition may be associated the ganglionic engorgement already described; the characteristic induration of the glands nearest the chancre; and the persistence of the initial sclerosis as a dense ridge, button, plaque, nodule, agglutination of tissue (digital chancre), or thin circumscribed sheet ("parchment" form of induration).

(*d*) *Syphilitic Fever.*—Recurrent, remittent, more or less persistent, and even intermittent elevations of temperature are of frequent occurrence in syphilitic subjects, more particularly in the early stages of the disease.

From one week to a fortnight before the first syphiloderm appears, with and without the icteroid, cachectic, or anæmic hue of the skin described above, the bodily temperature may rise to any point from 101° to 105° F., the lower figure representing the average of all cases where any such form is recognized by the physician, the higher temperatures often coinciding with a tolerably profuse first exanthem of syphilis. Usually this is a transitory symptom of the disease; but at times it persists for weeks. In cases, it is preceded by a sensation of chilliness or by distinct rigors. When remittent, the exacerbation is usually vespertine. There are commonly coincident thirst, malaise, *courbature*, and osteoscopic pains with headache and backache. In some cases, the febrile state is so insignificant as to attract no attention.

SYPHILODERMATA (Syphilides, Cutaneous lesions of syphilis).—The skin-symptoms of syphilis are numerous, widely different in type and career, and of the highest importance in the diagnosis of the disease. In any given case of syphilis, the greater number of skin lesions are displayed during the first two years after infection, that is, during the so-called secondary stage of the disease. They, however, occur often in grave forms in the late or tertiary period of syphilis.

General Characteristics of the Syphilodermata.—The skin-lesions of syphilis resemble the skin lesions of almost every non-syphilitic disorder, yet differ from the latter in certain special features. The study of these differences is essential to the recognition of the identity of the syphilitic exanthem. Their characteristics, generally considered, may be classed as follows: 1 Absence of subjective sensations. For the most part the syphilodermata are not accompanied by pruritus, or by sensations of burning, heat, pricking, etc. Notable exceptions to this rule may be found, but it is fairly constant of application, and due to the chronicity of the syphilitic exanthemata, their remarkable tendency to recurrence, and their striking amenability to treatment. 2. Career. The syphilodermata are rarely pyrexic; their course is essentially chronic; they are exceedingly liable to recur; and yet, as distinguished from the lesions of epithelioma and lepra, they are relatively rapid in evolution. They are greatly influenced by treatment, and are hence rarely seen when unmodified; but it is highly probable that all of them have, within variable limits, a cyclical career which would be pursued in most of the cases if no interfering agent modified their evolution. 3. Polymorphism. Multiformity of lesions—that is, the occurrence of multiple lesions of different elementary forms at one time upon the same person—is characteristic of several diseases of the skin, including syphilis. In the latter, papules, tubercles, pustules, ulcers, and maculæ may coexist upon the skin of an infected individual, who thus presents a striking contrast with the psoriatic patient, for example—the skin of the latter being often extensively covered with exclusively squamous lesions. 4. Color. The color of a cutaneous exanthem differs not only in different individuals of different color-type (blonde, brunette, African, etc.), but also in the same individual from year to year. This is true of the syphilodermata, the color of which exhibits the widest range of differences under different circumstances. Certain combinations, however, of the brown, the purple, and the duller hues of other colors are especially striking when seen in syphilodermata that are typical also in seat and configuration. The so-called characteristic color of the syphilodermata has been compared with that of raw ham and of coffee, shades which, when at all distinct, are highly suggestive. (See Plate LIII.) After complete involution of many of the syphilodermata, especially those seated on the lower limbs, the deeper pigmentations, suggesting chocolate, coffee, or ink in color, are often recognized. Most of these deeper tints are gradually and completely removed in the months or years that succeed complete involution of the lesion. 5. Contour. Many syphilitic lesions of the skin have a remarkable tendency to assume, wholly or in part, when grouped, a circular outline. This contour is often preserved when there has been both a grouping of elementary lesions and subsequent metamorphosis or degenera-



EARLY PAPULO-PUSTULAR AND PAPULAR SYPHILITIC ERUPTION.

(From the Collection of Photographs of Skin Diseases belonging to Dr. John A. Fordyce, of New York.)

Syphilis.

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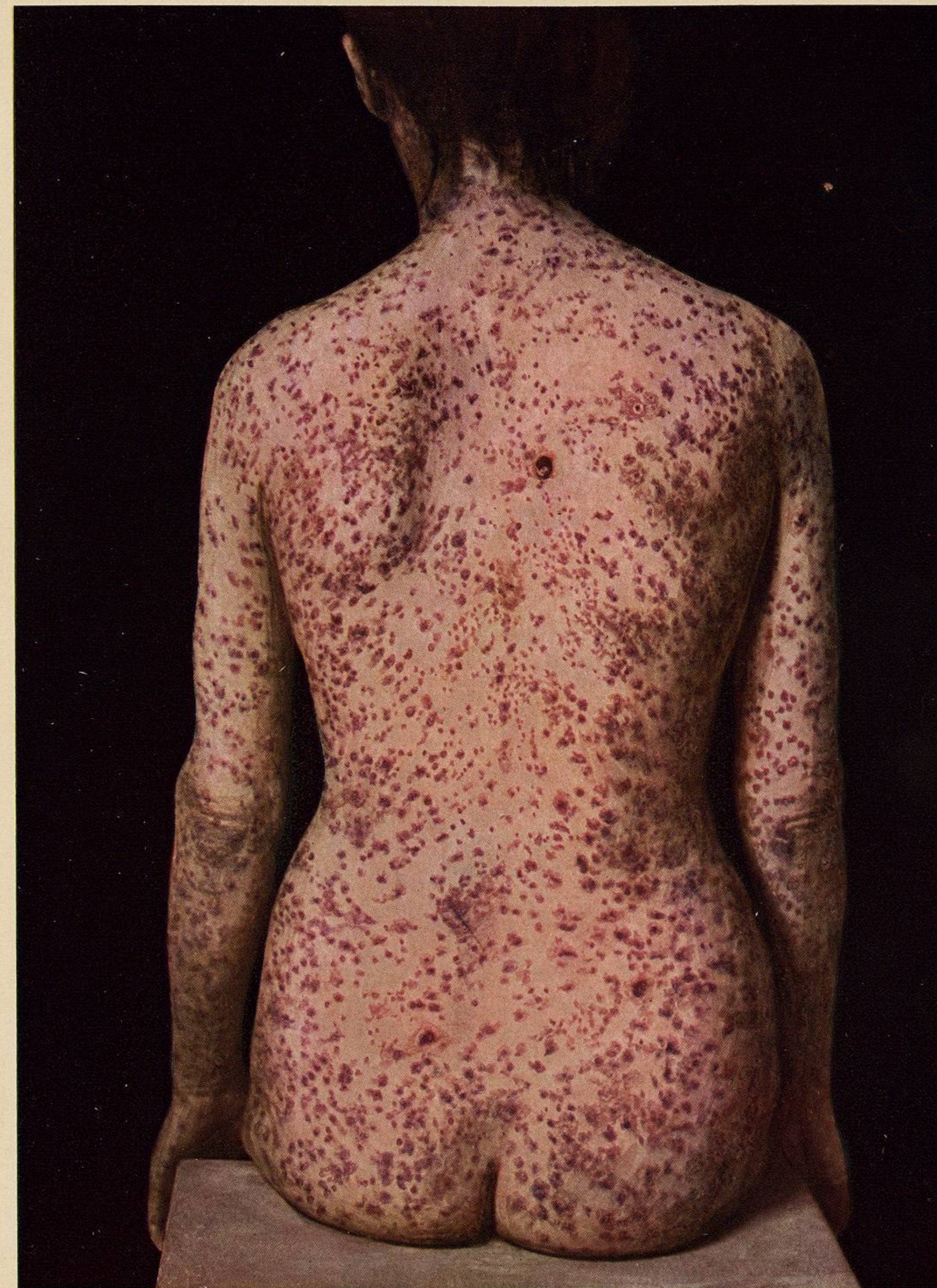

EARLY PAPULO-PUSTULAR AND PAPULAR SYPHILITIC ERUPTION.

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tion of the lesions thus grouped. In this way the figure of eight, the letter **S**, the dumb-bell, the kidney, and the horseshoe may be represented in outline by syphilitic papules in groups, ulcers, crusts, and even cicatrices. 6. Site. Any part of the skin of the human body may become the seat of a syphiloderm; and, indeed, the entire surface may be thus invaded, either by simultaneously evolved lesions or by rapid extension from one point to another. Syphilis may, however, affect for long periods of time a single region of the skin exclusively. This region may thus be preferred as the result of local irritation; for example, the palms of the syphilitic hand-worker, the uncleansed anal region of the syphilitic infant, and the mouth of the syphilitic tobacco-chewer. The so-called "corona veneris" is a group of dull-reddish, scaling papules on the forehead, which are peculiarly significant in male patients where the lining of the hat irritates the brow. 7. Amenability to Treatment. Mercury more particularly, and to a less extent the salts of potash after ingestion, are regarded by many practitioners as tests of the syphilitic character of any exanthem. There are few eruptions which amend under treatment of this character as readily as do the syphilodermata, but it is an error to conclude that the latter only are thus manageable. The great variability of the skin pictures in syphilis is largely due to modification by appropriate therapy. 8. Character of individual lesions. The scales of syphilis are rarely lustrous or nacreous; they are commonly small, dirty-gray, or darker in color, and rarely very abundant. Syphilitic papules are small or large, but often remarkable for a collarette of dirty, whitish scales surrounding their bases. The crusts of syphilis are apt to be dark-hued, in shades of deep yellowish, greenish, chocolate, and black, in consequence of the tendency of many syphilodermata to ulcerate and from the production in such ulcers of the pus and blood from which these colors are chiefly derived. The oyster-shell-like crust of rupia is wellnigh pathognomonic of syphilis. Syphilitic ulcers are prone to exhibit the circular outline, or traces of the reniform, figure of eight, letter **S**, and other shapes named above. The cicatrices left by such ulcers have necessarily a similar contour. They are, for the most part, smooth, supple, soft, and unattached. When recently formed, especially on the lower extremities, they are deeply pigmented in shades of chocolate and black. All, however, in time become white and lustrous, suggesting a thin sheet of mica when the centrifugal decoloration, which each very slowly undergoes, is complete.

THE MACULAR SYPHILODERM.—(*a*) *The Macular Syphiloderm due to Hyperæmia* (Erythematous syphilide; Syphilitic roseola; Exanthematous syphilide).—This is usually the earliest of the eruptions of secondary syphilis commonly appearing about forty-five days after the appearance of the chancre. It is developed in the form of symmetrically arranged, roundish, oval-shaped, or irregularly outlined, from the size of a split pea to that of a small coin, non-elevated, rosy, reddish-yellow, dusky red, or salmon-and-red maculæ, disappearing under pressure. Often at the outset this exanthem most resembles a slight mottling or marbling of the surface, and at times requires for its recognition careful observation on the part of the physician. It is probably more often unnoticed by the patient than any other symptom of syphilis, at times escaping observation entirely. It may be generalized, but is usually most conspicuous on the belly, loins, chest, and back. In well-marked cases the face (brow, temples, chin), back of the neck, and extremities, including the palms and soles, are conspicuously involved. It may be accompanied by the syphilitic febrile symptoms already described, substernal and other pains, engorgement of the cervical ganglia, mucous patches of the mouth, and other symptoms peculiar to this period. It may persist for a week and fade; or recur in fresh maculations. As the eruption survives, it is more persistent in color under the pressure of the finger. It is decidedly and promptly amenable to mercury. It is not to be confounded with the exanthematous fevers (the thermometer readily indicating the difference); nor with urticaria and the medicamentous rashes, which are more acute in type and accompanied by well-marked subjective sensations; nor with the yellowish patches of tinea versicolor, where a vegetable parasite is visible under the microscope. None of these affections exhibits the other signs of syphilis present in the person displaying the erythematous syphiloderm. The chief diagnostic danger, however, in this connection lies in ignoring, in certain cases, the special character of this indolent, scarcely appreciable exanthem, which rarely attracts attention by subjective annoyance, rather than in any difficulties in determining, after its discovery, to what special disease it is due.

(*b*) *The Macular Syphiloderm due to Pigmentation* (Pigmentary syphilide).—This exanthem occurs in an irregularly circular, ill-defined reticulum, of brownish or chocolate-shaded maculations, the color of which does not fade under the finger. Often there is unusual whiteness about the pigmentations, centrally or peripherally situated. Dr. Fox, of New York, has shown that after the central pigmentation develops there is a centripetal decolorization with deposit of pigment in excess in the interspaces of the original maculæ. The eruption is common about the neck and shoulders of blonde women. Illustrations of this condition in concentric circles of large pinhead-sized maculæ, alternating with rings of pigment, may be seen in Chinese subjects of syphilis. The lesions are obstinate under treatment, and are often included among the doubtful exanthemata of the disease. They are pigment anomalies, occurring in syphilis as in other diseases influencing the nervous centres.

THE PAPULAR SYPHILODERM.—The papule is the type of most of the syphilodermata. Many of the others are evolved from it; and it is probable that a large proportion of chancres and most mucous patches, condylomata, tubercles, and similar lesions are essentially papules which have been modified by the accidents of site, moisture, heat, etc. Syphilitic papules are circumscribed firm elevations of the surface, ranging in size from a millet-seed to a split pea. They may occur as the earliest cutaneous symptom of the disease in its earlier stage, or be developed from the macular syphiloderm described above. They may be small or large, pointed or flat, disseminated or in groups.

The Small Acuminate, Papular Syphiloderm ("Syphilitic lichen," Miliary papular syphilide).—This eruption appears in the form of pointed, firm, circumscribed papules the size of a pinhead or of a millet-seed, often copiously developed, with or without febrile symptoms, over the belly, chest, arms, back, and extremities, and usually in defined groups. The eruptive elements vary in color from rosy reddish to mulberry or purplish hues, differing widely in light and dark skins. Often the outer layer of the stratum corneum of the epidermis is slightly separated about the individual papule, which is thus surrounded by a faintly defined collar of scales. Often, also, when irritated they exhibit a minute vesicle, pustule, or scale at the apex. Where numerous, they are often symmetrical and very closely set together. Brownish-red blotches may follow their involution. The eruption may persist for months, and, with or without relapses, may appear in circular or semicircular groups, a ring of minute papules partly or wholly surrounding a confluent central patch.

The Large Acuminate, Papular Syphiloderm.—The small lesions described above may be, in special localities, developed to lenticular dimensions, retaining the conical apex. They may be seen on the back, shoulders, and chest as purplish-red rather than bright-red papules, especially in the coarse skins of male patients. They may develop at the apex minute pustules, the involution of which leaves a small crust cap. They should not be confounded with iodic acne.

The Small Flat, Papular Syphiloderm.—This eruption is made up of roundish or oval, reddish to deep brownish, distinctly circumscribed and softish papules, from the size of a large pinhead to that of a split pea, and having a flat surface. They are often seen on the chest, face,