of a typical syphilitic aspect, with pultaceous floor, steep, "clean-cut" edges, ichorous secretion, and serpiginous tendencies.

Mixed forms of commingled resolutive and ulcerative tubercles are not of rare occurrence. The following are

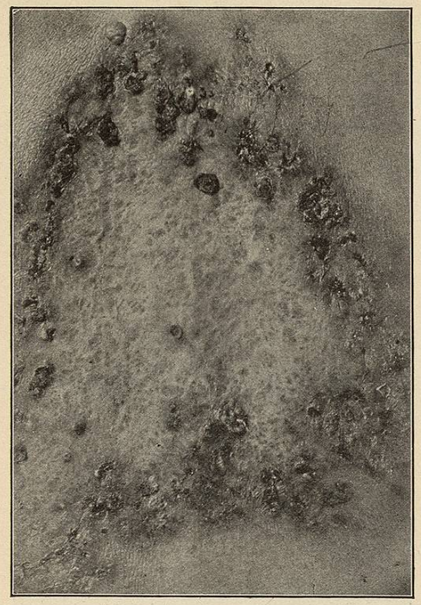


FIG. 4588.—Enlarged Portrait of Group of Lesions shown in Fig. 4587; showing Peripheral Extension by Multiple Circumscribed Ulcers.

common clinical pictures: A patient, from five to ten years after infection, has the forehead, nose, and cheeks fully covered with numerous, firm, smooth, shining nodules, the size of a pea, vivid and dull red in hue, occupying an infiltrated integument of the same general color. Some of the tubercles are slightly crust-capped, others are irregularly excavated as if wasting at such points. Between them are distinctly defined, atrophic, non-pigmented depressions from the size of a large pinhead to that of a pea resembling youngish scars. These are spread with some regularity between young and mature tubercles even at the scalp border and among the hairs over the tip of the nose and well over the cheeks. Uneven and verrucous patches may indeed occupy distant portions of the scalp where hairs have fallen from an atrophic area. Sometimes they undergo colloid degeneration. Attention is particularly directed to this complexus of nodules, crusts, atrophic discs, minute ulcers, and scanty pustules when occurring in this region, as it is a feature very rarely seen in any other disease than syphilis.

In most of these cases the changes wrought in the course of time after the employment of an appropriate therapy are marvellous. The violaceous tint disappears; the scars, if any have resulted, are transformed into thin superficial uncolored or dead-whitish inconspicuous blemishes; the natural fat of the panniculus adiposus is restored; and, even in middle life, after the fullest grade of evolution described above has been reached in the face of a woman, a fair degree of comeliness is restored.

Lupus vulgaris is distinguished from this condition by its onset at an earlier period of life, its far narrower limitations, its greater asymmetry, its profounder and more disfiguring scars, and its much more indolent career. The tubercles of lepra producing the characteristic leontiasic aspect of the face are far more chronic in evolution, more deeply pigmented and "varnished," less often ulcerated, crusted, and commingled with scars. The pearly, milium-like nodules of epithelioma are quite unlike the tinted tubercles of syphilis, are never so numerous, and the smooth-glazed, bright red, and scantily secreting floor of the epitheliomatous (rodent) ulcer never suggests the foul excavations of syphilis. Psoriasis is always scaly, never ulcerative in type, never crusted nor pustular. The most difficult cases for differential diagnosis are those of hypertrophic acne of the nose, with gaping orifices of sebaceous ducts whence comedo plugs may have been expressed, interspersed between dull-reddish acne papules. Here the history of the case, the absence of scalp-lesions, the stricter limitation of the patch to the tip and alæ of the nose, the absence of a distinct ulcer, and the conspicuously smaller size of the scar-like depressions, usually furnish a clew to the distinction sought to be established.

The blastomycotic patch is almost invariably distinguished by its characteristic encircling border or wall, on the sound side of the integument sloping gradually to the level beneath, studded with exceedingly minute pin-

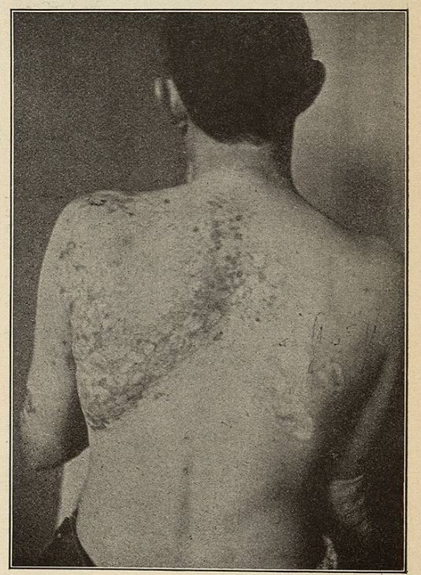


FIG. 4589.—Tubercular Syphiloderm of the Shoulders, showing Scars and Pigmentation.

point-sized abscesses, in the contents of which can readily be distinguished the double-contoured organism with its lucent lenticular space within.

THE GUMMATOUS SYPHILODERM.—Single and multiple, isolated or massed nodules, from the size of a pea to that of an egg, or larger, originating simultaneously, but

commonly invading the skin as they develop, occur in late, rarely in early, periods of syphilis, and are termed gummata in consequence of the gummy material they furnish when disintegrating. They are rarely numerous, often not more than from two to six affecting a single patient. As an exceptional fact, hundreds may be seen covering different regions of the body. They are peculiar to syphilis; in other words, they do not pursue, in the course of other affections, the same classical cycle of evolution and involution. Yet they are really syphilitic tumors, allied, on the one hand, to the hyperplastic process which produces the papule and tubercle, and, on the other, to the histological type of tumors in general. Pathologists have some ground for believing that the so-called gummous material of this lesion is to be recognized in the nodules that glue the iris to the capsule of the lens, and even in the neoplasm that constitutes the mass of the initial sclerosis.

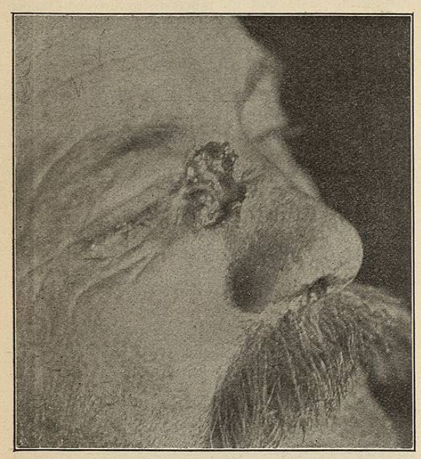


FIG. 4590.—Gummatous Ulcer Simulating "Rodent Ulcer," near the Root of the Nose.

After development, gummata may for a long period of time be perceptible beneath the skin as smooth, circumscribed, insensitive, firm nodules, undergoing no change. Later, they become slightly painful; there is passive hyperæmia of the overlying skin; attachment between the skin and the tumor is effected; then follow, usually, fluctuation and evacuation (spontaneously or by surgical interference) of inspissated blood and pus, or of the contents of a true, circumscribed abscess. The gummatous mass constituting the tissue, bathed in pus and blood, is slowly or rapidly removed by this process, in the course of which is formed the gummatous ulcer. This has the circular outline, precipitous edge, sloughy floor, foul secretion, livid halo, and phagedenic tendencies already described as characteristic of the syphilitic ulcer in general, with this special added feature, that it is particularly deep. Its floor rests on subcutaneous tissues. It may involve fasciæ, periosteum, muscles, large vessels, bursæ, nerves, bones, tendons, and other important tissues. Its walls, carefully inspected, often exhibit the sharp and resisting edge of a dense aponeurosis, the glistening white border of a tendon, or the firm periosteum sheathing an osseous plate.

Occasionally gummata are lodged in, rather than beneath the skin, the firm, movable mass being then readily defined by palpation. Whether superficial or deep in situation, they may undergo complete resolution. When disintegrating by ulceration, they may go on to produce those extensive and formidable losses of tissue, complicated with erysipelas, pyæmia, etc., in the subjects of cachexia and alcoholism, which make syphilis, in some of its manifestations, a veritable scourge. Though occasionally numerous, not more than from six to eight are usually to be recognized in the person of a single patient. They are most frequently developed upon the lateral surfaces of the legs, and, next, proportionally after these, over other parts of the extremities, the face, scrotum, buttocks, neck, and the breasts of women. The importance of their recognition in the last-named situation, when the question of cancerous and other malignant tumors of this organ is presented for consideration, can scarcely be overestimated. The author has seen a gumma the size of a turkey's egg in the breast undergo complete involution under specific medication only.

The elephantiasic aspect of the face and legs of certain patients who are afflicted with extensive gummatous tumors and infiltrations of the cutaneous and subcutaneous tissue is a matter of great moment for the diagnostician. In almost every community there is some such patient, with a striking deformity, the nature of whose malady has been altogether unknown for years. In such cases there is often an obscure history, which, perhaps, the expert alone has been able correctly to interpret. The patient has been supposed to be the victim of "elephantiasis." The nose, lips, cheeks, and chin are possibly densely thickened, distorted, empurpled, and irregularly ridged and seamed with nodules, scars, and ulcers; or the leg is in the pachydermatous condition seen in the "Madura foot" and other diseases. It is a large, unwieldy organ, ridged, of cartilaginous hardness, furrowed, and covered with an integument looking like the

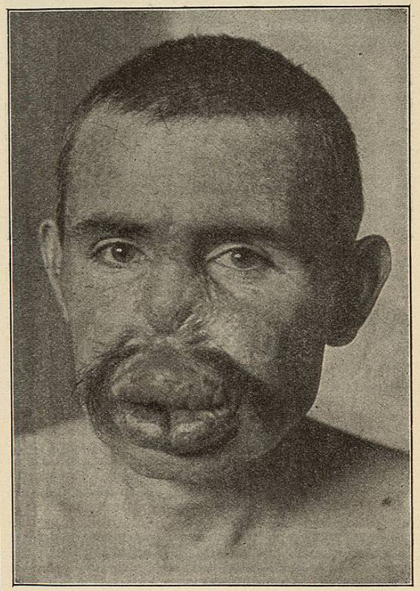


FIG. 4591.—Gummatous Changes in the Face Simulating Lupus Vulgaris, Resulting in Occlusion of the Nares.

bark of a tree. Careful inspection, however, always reveals in this mass the typical cicatrices of ancient gummatous ulcers, and the traces of new and old nodules buried in the hypertrophied and œdematous mass. Here, as in so many other of its formidable aspects, syphilis reveals its amenability to proper management. The changes that can be wrought by treatment in these apparently desperate cases are in a high degree satisfactory.

THE SERPIGINOUS SYPHILODERM.—Though not distinguished by the name of an elementary lesion the preponderance of which might justify such a position, this syphiloderm has an individuality requiring separate consideration.

In its superficial forms the serpiginous syphiloderm is preceded by the appearance of small, pointed or flat syphilitic pustules, which form a circular or partially circular group of lesions in discs of the size of an egg and larger. These discs are soon covered with a yellowish, greenish, or blackish crust, which gradually clears from the centre, leaving there a granulating or smooth, reddish or normally tinted, atrophic or only superficially altered integument, surrounded by an entire or broken ring of attached crusts, beyond which is a livid halo. Underneath this latter is a superficial, centrifugally spreading ulcer, uniformly annular in contour, or here and there broken by bridges and islands of unaltered skin. Often this annular ulcer is seen to be composed of roundish excavations, the size of a pea and larger, arranged circle-wise, with confluent crusts. In other cases the crust is scarcely more than a narrow ring, no broader than the smallest penknife blade, which, as it spreads centrifugally, leaves cutaneous areas of former invasion the size of the palm and larger, pinkish-red or slightly pigmented in color, at times decidedly cicatriform, at other times texturally unaltered. In this way an entire buttock or limb, or the face, may be progressively involved.

The deep serpiginous syphiloderm generally spreads from a gumma or other late lesion of syphilis. A deep ulcer results, which attacks the subcutaneous tissues. The centre is soon represented by a tender or firm scar; the advancing edge by a thick, greenish or blackish, adherent crust, covering a deeply cut circular exulceration with punched-out walls and foul secretion. The dull, purplish areola of all similar lesions is visible at the periphery beyond its advancing edge. Its progress over the skin is decidedly more serpiginous than in the direction of the radii of a circle. Here and there a kidney-shaped or horseshoe-shaped edge exhibits a deeper excavation, or a more tenacious, bulkier, and darker crust. In yet another part of the same disc the ring may be represented by a partially cicatrized border, or by a wide bridge of unaffected skin. This is a late, exceedingly obstinate, and intractable form of syphilis, leaving generally a deforming scar. It is to be distinguished from lupus vulgaris (which is more often seen on the face) by its definite outline, its deep pustular, rather than nodular, elementary lesions, its sharply cut ulcerations, but, above all, by its relatively much more rapid progress.

MALIGNANT SYPHILODERMATA.—Syphilitic cutaneous and subcutaneous lesions are at times malignant in type, and then commonly precocious in occurrence and acute in course. They are described by Bazin and other French authors as "malignant precocious syphilides." The intensity and violence of the symptoms in these cases is in general due to the occurrence of the disease in cachectic subjects, those who are debilitated by age or previous or concurrent diseases, those deprived of the essentials of healthy living, viz., wholesome food and drink, hygienic environment, freedom from mental anxiety, and a proper adjustment of labor to bodily vigor.

In patients of this class the chancre is scarcely cicatrized before symptoms threatening malignancy appear. They are divided by most authorities into (*a*) the purovesicular syphiloderm; (*b*) the tuberculo-ulcerative syphiloderm; (*c*) the gangrenous tuberculo-ulcerative syphiloderm. These names are mainly groups of symptom phrases, the lesions themselves exhibiting a wide variation indicated by both mild and grave characters.

The milder forms are really rupioid lesions following isolated or grouped pustules, which are rapidly followed by ulcers, thickly covered with laminated crusts. In certain cases, when the disease has progressed for long periods of time, the resulting keloid-like scars are both extensive and disfiguring. (See Plate LV.) In a more accentuated form the malignancy of the outbreak is indicated by the development of blebs or lenticular tubercles, which hasten to break down into ulcers of characteristic syphilitic edge, secretion, floor, base, and areola, which attack the face, trunk, hands, or extremities. The graver forms are tubercular, ulcerative, and gangrenous. A group of nodules in or beneath the skin surrounds itself with significant purpuric points, supposed to indicate an endarteritis of the peripheral vascular elements. The whole rapidly or slowly becomes gangrenous, showing a dry, blackish eschar, which spreads at the periphery, and insidiously, as it encroaches upon the sound tissues in the vicinity. Sometimes a line of demarcation is formed, not between the gangrenous mass and the sound skin, but between the former and a thickened empurpled zone which surrounds it. When the slough is removed, a conical crateriform ulcer is exposed, having a fetid secretion, a sloughy floor, and markedly everted edges. The destructive process may progress till fatal results are produced, the patient succumbing to fever or marasmus and adynamia. But this is rare. Under the best treatment repair sets in, granulation is followed by cicatrization, and there is apparently complete restoration of the general health.

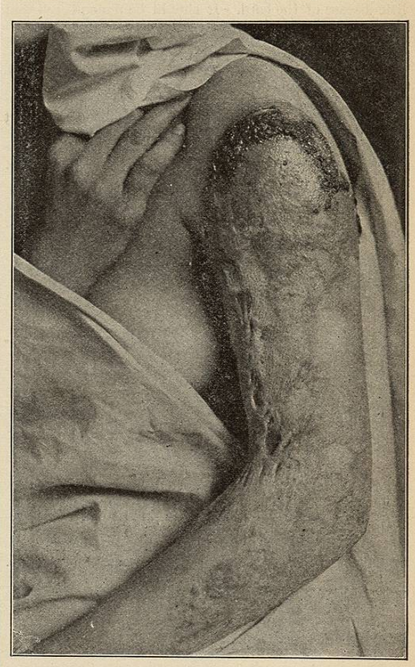


FIG. 4592.—Extensive Gummatous Ulceration of the Left Arm, with Production of Keloid in Cicatrized Portions.

Cutaneous lesions and symptoms other than the forms described above are neither numerous nor important, but have been described by authors. Bronson, of New York, has described an erythanthema syphiliticum in which vesico-pustular and other lesions were grouped upon an erythematous base. Hemorrhagic effusions within the skin occur chiefly in patients who are the subjects of hæmophilia, and who have also contracted syphilis; in children afflicted with hereditary syphilis; in patients with paraplegia resulting from syphilitic involvement of the cord (purpura of the lower extremities); and as an accident of a number of secondary and tertiary lesions. The author has seen two such cases occurring in syphilitic disease of the cord. It should be remembered that the iodide of potassium, when administered for the relief of syphilis, may produce purpuric spots, especially over the lower extremities.

Lastly, eczema, psoriasis, the animal and vegetable parasitic affections of the skin, pruritus, and the various dermatites, all the forms of acne due to the ingestion of the iodic compounds, and other cutaneous disorders, affect the syphilitic as well as the non-syphilitic patient. Each of them exhibits its special peculiarities, apparently not at all or very slightly modified by the syphilitic infection, and is recognized in its identity as distinct from the manifestations of syphilis without great difficulty on the part of the diagnostician. This recognition is a matter often of the highest moment, as the anxiety and dread occasioned in many patients by the discovery of these intercurrent affections (to which the mass of mankind is subject) are out of all proportion to the real import of the symptoms presented in such cases.

Treatment of the Syphilodermata.—The internal treatment of the syphilodermata is that of syphilis in general, including the use of mercury, the iodide and other salts of potassium, iron, cod-liver oil, and a nutritive regimen.

Many of the lesions, however, require local treatment. The salves which are most effectively used with this end in view contain one of the salts of mercury. Among these may be named the ammonio-chloride, in the strength of from five grains to two drachms to the ounce (0.33 to 32.0); the red oxide, in the strength of from five to ten grains (0.33–0.66) to the same quantity; the ten or twenty per cent. oleate of mercury; the mild chloride, in the strength of from ten to thirty grains (0.66–2.0); mercurial ointment, in the strength of from half a drachm to a drachm (2.0–4.0) to the ounce; and the ointment of the nitrate of mercury in nearly the same strength. The bases of these salves may be vaseline, cold cream, lanolin, or simple cerate, a drachm (4.0) or more of glycerin being added to the ounce (32.0) of each when requisite to produce softness in the mass. Vaseline is preferably employed as a basis for salves to be applied over the scalp and hairy parts.

The tars also are often employed with advantage, including the oleum cadini and the oleum rusci (rectified or crude), in the strength of from half a drachm to a drachm to the ounce (2.0–4.0 to 32.0) of basis, adding an equal quantity of finely levigated prepared chalk to obtund the sharpness of the tar. These are excellent applications to palmar and plantar syphilodermata, when preceded by maceration of the affected surfaces for several minutes in water as hot as can be tolerated. Often the thick epidermal scales of these regions are best removed at the time of these macerations by the aid of a shampoo prepared by adding an ounce of glycerin to two or more ounces of the tinctura saponis viridis of the Pharmacopœia. After the shampooing with hot water, the hands or feet are dried, the salve well rubbed in, and gloves are drawn over the hands, or stockings over the feet. Other ingredients are often incorporated with such salves with excellent effect. Among them may be named salicylic acid, ten to twenty grains to the ounce (0.66–1.33 to 32.0); chrysarobin, pyrogallol, and ichthyol, in the same strength; zinc oxide and the subnitrate of bismuth, half a drachm to a drachm to the ounce (2.0–4.0 to 32.0); and the oleate of lead, in the form best known as Hebra's unguentum diachyli albi.

Powders occupy a most important place in the local management of the syphilodermata, more particularly those that are ulcerative in type. Among them may be named europhen, iodoform, iodol, aristol, hydronaphtol (one part to fifty of fuller's earth), boric and salicylic acids, calomel, starch, camphor, and lycopodium. Many of these are advantageously employed over such moist lesions as condylomata after they have been washed in a lotion of chlorinated soda or carbolic acid, so as to be not only deodorized but thoroughly cleansed.

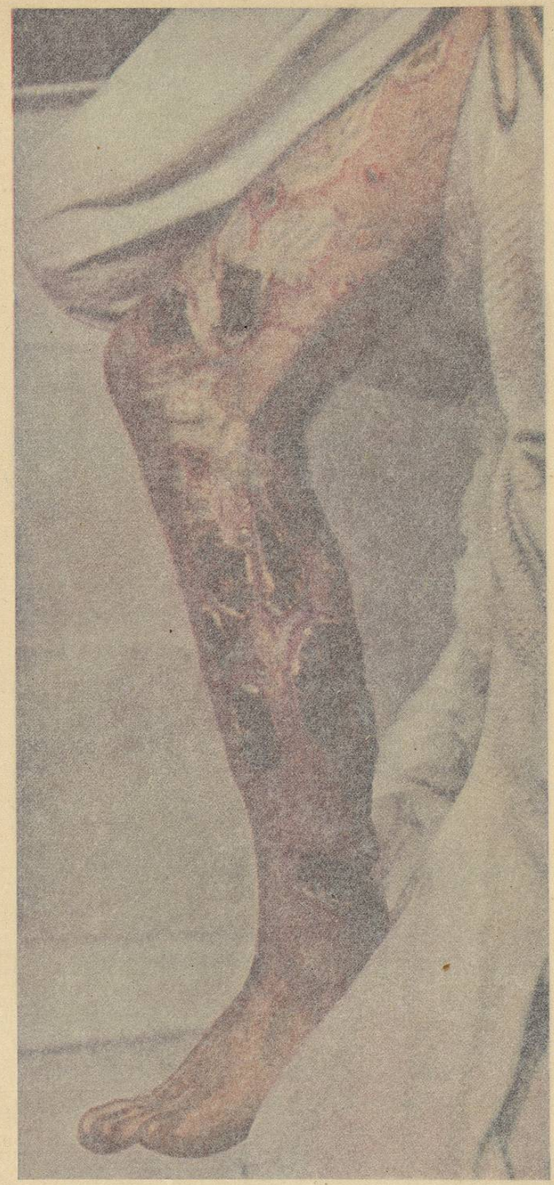
Lotions of the kind just suggested are useful in the management of a number of the secreting syphilodermata. Others are compounded with the corrosive sublimate, one-half to one grain to the ounce (0.33–0.66 to 32.0) of bay rum, cologne water, or the rectified spirit of wine. Lotions containing tar, salicylic acid, carbolic acid, and boric acid (often in saturated solution) meet the indications of many cases.

For the purpose of stimulating or otherwise dressing mucous patches and indolent ulcers, solutions of the nitrate of silver, five grains to a drachm to the ounce (0.33–4.0 to 32.0), or crayons of the solid salt may be used; or even the strong caustic solutions, *e.g.*, of the hydrate of potassium twenty to sixty grains to the ounce (1.33–4.0 to 32.0), or of nitric acid. Solutions of corrosive sublimate in tincture of benzoin, or of myrrh, one to two grains to the ounce (0.066–0.033 to 32.0); benzol, creosote, and solutions of the permanganate of potassium and resorcin, one to five per cent., are also useful in many cases; the first two for destructive effects, the last as antiseptic dressings.

Many of the syphilodermata are effectively treated by the modern methods of radiotherapy (exposure to the *x*-ray). The duration and frequency of the exposures, together with the precautions needed to avoid the serious consequences of improper use of this effective and often proportionately dangerous agent, are governed by the rules formulated in experience acquired by treatment of non-syphilitic cutaneous affections by the same method. We have reserved the application of the rays to obstinate chronic engorgements of the skin, such as are occasionally recognized in the palmar and plantar syphilodermata; and to some of the persistent mucous and scaling patches of the lining membrane of the mouth.

The principles on which should be based the local treatment of the syphilodermata are those recognized in all similar non-specific affections of the skin. Of chief importance is the treatment of the disease itself, whether by internal medication, inunction, fumigation, or hypodermatic injection. To this, in most cases, the local treatment may be added with marked advantage. The scalp, hands, and feet may be often shampooed, and subsequently dressed with a salve or lotion. Pustules are to be opened, crusts removed, and small or large ulcerated surfaces cleansed, cauterized, or stimulated, and antiseptically dressed. Soap and water are as imperatively required for the syphilitic as for the non-syphilitic skin. Frequent applications of water as hot as can be tolerated are often required for the relief of pain, and the surgeon's knife is needed for opening softened gummata. In extensive syphilitic ulcerations an exceedingly valuable resource is the use of the continuous hot-water bath as employed in Vienna, the patient, if his ulcers can be in this way immersed in the water, remaining in it for hours, the bath being kept as hot as is grateful to the surface of the immersed skin. The bath is left only on occasions requiring evacuation of the contents of the bladder or of the rectum, or in order to secure sleep. Lastly, the mercurial, rubber, lead, and other surgical plasters, borated cotton, antiseptic lint, and wool (medicated with the mercuric iodide), prepared oakum, fuller's earth, and the other articles needed to make the dressings of modern surgery, are never more useful than in the management of multiple or extensive syphilitic ulcers.

Affections of the Hair, Hair Follicles, and Hairy Regions of the Skin.—A common manifestation of syphilis is a loss of hair, in excess of the physiological defluvium capillitii, resulting in alopecia. This



Late Syphilitic Eruption (Ulcers) Preceded by Bullae, in a Cachectic Subject.

Photograph taken a few days before the death of the patient.

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