more probable, for the secretion of a syphilitic chancre seems more readily inoculable than that of secondary lesions. Further, it is certain that as the disease advances its transmissibility by inheritance declines. A syphilitic mother will abort in her early pregnancies, then produce a dead child at or before term; next a child who may die in a few weeks, with specific eruptions; then another who may have only mild symptoms of inherited syphilis; and, finally, in the tertiary stage of the mother, her children may be born healthy, and continue so indefinitely. Youth and strength do not insure a mild attack to a patient with syphilis, nor does age or debility necessarily imply a severe one.

Excesses of every sort, of wine, of women, of work, are liable to intensify the type and duration of existing syphilis. Climate also seems to have some influence. Treatment throws confusion into the natural order of appearance of the eruptions, postpones their outbreak, lightens their character, shortens their duration, and, in the most favorable cases, almost prevents them entirely.

All local irritations tend to call out eruptions at the points irritated, and to maintain them there. A child born with inherited syphilis may give no evidence of his malady until he is vaccinated, whereupon an eruption may speedily appear, become general, and be attributed to the innocent vaccination. A blister in the same way, even upon an adult, may call out dormant syphilis. Not infrequently a cold, great heat, any excess, a fatigue, an irritating or sulphur bath, friction, electrization, may be the exciting cause calling dormant syphilis into action and occasioning an eruption. Patients who work much with the hands are more liable than others to eruptions of the palms. Perspiration upon overlying portions of skin often intensifies a given eruption at such points, as under the female breast, around the umbilicus, between the scrotum and the thigh. Lack of cleanliness around the anus and under the prepuce is a powerful predisposing cause to mucous patches, while the use of tobacco chewed or smoked is proverbial for its power of originating and maintaining the same lesions in the mouth. A mucous patch of the tongue is often occasioned and indefinitely prolonged in a syphilitic subject by friction of that member against the rough edge of a tooth, and the suction of a baby on the nipple calls out mucous patches there. A knowledge of all these facts is of great importance in making a general prognosis.

Bad hygienic surroundings materially aggravate and prolong syphilitic manifestations, to such an extent, indeed, as often to render specific treatment absolutely unavailing or even harmful, until the patient is removed from such surroundings.

Duration of General Syphilis.—There is no disease so protean in its form as syphilis.

"Age cannot wither her, nor custom stale her infinite variety."

Syphilis finds expression through every tissue. Its symptoms simulate

those of a vast number of other diseases, and some of its forms may be so obscure as to baffle accurate diagnosis without the assistance of the touchstone treatment. So true is this, that it has passed into a proverb among certain of the less well-informed of the profession, in face of an obscure disease, "If you do not know what to do, treat the patient for syphilis." The unscientific looseness of such a course needs no comment; but the existence of the proverb is the best argument to substantiate the protean type of syphilis. Only minute and careful investigation into the more obscure manifestations of the disease can lead to accuracy of diagnosis, which is of more importance in this than perhaps in any other malady. Hence the difficulty of saying when syphilis has ended, or indeed of deciding that it ever does end, since it so often permanently modifies the diathesis of the individual who has suffered from it. Syphilis may occur in so mild a form that the patient may never know he has it; or, again, with such intensity that extensive lesions of the skin, bone, and other tissues, may come on within the first year, with paralytic symptoms of great extent and severity. Syphilis may manifest itself as a mild eruption after chancre, disappearing possibly without treatment, and then (exceptionally, it is true) lie latent for many years, as long as fifty-two years,[1] to reappear with characters due only to syphilitic disease. In Fournier's case, a gentleman of seventeen had acquired chancre, followed by some secondary eruptions, which were pronounced syphilitic. No further symptoms had appeared until the age of sixty-nine—fifty-two years after the chancre—when he had suffered from syphilitic caries of the upper jaw. At seventy-two he applied to Fournier for a gummy tumor of the thigh, which got rapidly well under the iodide of potassium. Now, in this case, had the patient died at the age of sixty-eight, he might, with seeming justice, have been reported as an instance of cure, for over half a century would have intervened since his last syphilitic symptom.

This one case gives at a glance the practical answer to the whole question of the duration of syphilis. Every physician of any considerable experience with syphilis can recall analogous cases, though, perhaps, less striking. Syphilis, once acquired, stamps its impress upon the individuality of the patient, and becomes a part of him, and no power on earth in a given case can say when that impress disappears. A half-century may pass away and the trail of the serpent be still visible. This is a fact, and as such must be recognized. It is of vast practical importance, and to shut our eyes to it would be folly. That we do not so shut our eyes, even those of us who believe in an early and radical cure of syphilis, is sufficiently shown by the avidity with which, in doubtful cases of skin or bone disease, the history of the patient is carefully inquired into for a record of preëxisting syphilis, which, if found, no

[1] Fournier, "Notes sur un Cas de Gomme syphilitique survenue 55 ans après le Début de l'Affection," Paris, 1870.

matter how distant, makes the diagnosis, establishes the treatment, and often leads to a cure.

Yet, in spite of this assertion, who shall say that syphilis may not be cured? Occasionally cases are seen where syphilitic chancre is acquired a second time, followed by crops of secondary eruptions, and surely in these cases the old syphilis must have been cured, or the new one could not have appeared. Yet in some of these cases tertiary symptoms have been present when the second chancre was acquired, but this again only coincides with the evidence furnished by clinical observation: namely, that the virulence of syphilis disappears in the late tertiary period; that during this period neither the blood nor the pathological secretions will infect a healthy subject with the disease, and that such patients may be the parents of perfectly healthy children, who never manifest the faintest sign of syphilitic poisoning. The necessary conclusion, then, is this: that while symptoms which can depend upon no other disease than syphilis may crop out at any period during the life of a patient, who has once had syphilitic chancre, yet the virulence of the disease and its contagious properties do die away in time, what are left being more properly sequelæ in the received acceptation of that term.

The above is the possibility of the duration of the effects of syphilis, and must be recognized by every intelligent physician who wishes to accept facts and desires to view syphilis in a practical light. The probability of the disease in most cases, however, is that its manifestations will disappear finally after a few years, and this under intelligent management becomes almost a certainty.

Syphilis is no longer the terrible scourge it proved itself in the fifteenth century. It is rarely fatal except in the visceral form, and the majority of patients escape this stage entirely. It is hardly too much to state that, of the two diseases, gonorrhœa and syphilis, the former sends more patients to the tomb than the latter. Neither kills directly; both do so by their sequelæ. The classical mode of death as resulting from gonorrhœa is through stricture, to fatal bladder and kidney disease; and, whatever the ratio of deaths to attacks may be in the two diseases, it is highly probable that more deaths actually occur from gonorrhœa as their first cause than from syphilis.

Syphilis, again, has the advantage of being a manageable disease. Its symptoms yield to treatment far more readily than do those of any other chronic malady, and it is precisely in that period where the disease is most destructive to tissue and to life, the tertiary stage, that remedies are the most brilliantly effective. Syphilis, as encountered in the higher walks of life, is a mild but terribly lurking and insidious disease. It may escape attention altogether. Many ladies come by it honestly, but never know they have it. Children develop some obscure symptoms; the significance of which escapes not only the parents but also the family physician; and even a man may get chancre, followed by some light eruption, consider it of no importance, and get well spontaneously, marry, and have healthy children, himself remaining entirely free from any evidence of the disease, and dying in a green old age.

Practically what the physician wants to know is this: during what time are symptoms liable to recur before that long latent period may be expected, which is to terminate all manifestations of disease, and in which the patient is certainly well, probably cured? Or, still more practically, the question may be put: If a patient presents himself with syphilitic chancre, at what period may he safely marry?

Roughly, and on the average, this last question may be answered by saying, after about two and a half years, or to be safe regarding marriage, one year after the disappearance of the last syphilitic symptom, treatment having been continuously kept up, and being continued until after the birth of the first child. This may be said, because well-managed syphilis usually ceases to relapse in about that time. Those patients most often do badly, other things being equal, who follow irregular and uneven courses of treatment, now pushing medication to excess, in the hope of killing the disease, which is impossible, now giving up all treatment in despair. It is very rare for bad symptoms to appear upon a patient who falls into the hands of a conscientious physician, one who recognizes that the disease cannot be jugulated, that the eliminative and not the abortive treatment must be followed, and who quietly and steadily pursues the enemy through its periods of repose, as well as during its moments of eruption, confident that, by mildly and persistently keeping up this treatment by extinction, he will triumph at last over the disease. In mild cases so treated there may be but one faint eruption, or perhaps but a few little spots, with epitrochlear, glandular induration and a few mucous patches, to mark the disease, the whole of the symptoms only lasting a few months after chancre, and the patient's after-life being healthful. This, however, is the exception. Ordinarily some mild symptoms continue to crop out from time to time, for perhaps on an average two to three years, after which comes the period, be it cure or not, during which the patient bears all the marks of health, is unable to communicate the disease, and reproduces healthy offspring.

Finally, there are exceptional examples where late tertiary symptoms appear after long years of latency, as already observed; of malignant syphilis which is controlled with difficulty by treatment; and, of other inveterate specimens of disease where relapse after relapse follows through long series of years, perhaps in spite of a continuous intelligent treatment.

These last cases may be mostly ranged under two heads:

1. Those living in bad hygienic surroundings, and giving themselves up to excesses of every sort.

2. Patients possessed of a strong tendency to gout, or of decidedly scrofulous diathesis.

INFLUENCE OF GOUT AND SCROFULA UPON THE COURSE OF SYPHILIS.—Both gout and scrofula may exercise a disturbing influence upon the course and the manifestations of syphilis. In the rheumatic or gouty subject the cutaneous symptoms partake of the gouty type. They are apt to be dry, erythematous, papular, tubercular, scaly, of a particularly livid red, of great chronicity, leaving much pigmentation behind. Certain purely gouty eruptions are almost indistinguishable from similar ones produced by syphilis, and these, when occurring upon a patient who has had syphilis, give rise to great difficulties of diagnosis, and are most often mistaken for syphilides and treated as such, either without effect or until they spontaneously disappear, when the specific medication gets the credit of the cure. Such gouty eruptions are the dry, papular patches or single papules about the hands, on the palms or back, upon the feet or elsewhere; scaly patches, generalized papular and scaly livid eruptions on the extremities or back, especially such as occur during the spring or fall, and during the heats of summer (from the acridity of the perspiration). The different forms of psoriasis, as seen upon an individual of the gouty habit, possess many of the characteristics belonging to syphilitic eruptions, and often lead to error. These eruptions which have been just mentioned do not itch (as a rule), and their diagnosis (when found upon a syphilitic patient), from inspection alone, is always difficult, sometimes impossible. Treatment may be required to solve the problem. Syphilides on a gouty patient get well quite promptly, while other eruptions are not sensibly affected by anti-syphilitic remedies.

Besides this simulation of syphilis by certain gouty eruptions, whether they occur on a patient who has had syphilitic chancre or not, the gouty diathesis tends to make the type of syphilis an obstinate one. During the employment of treatment, and in spite of it, in some such cases, a new eruption will crop out, while the tendency to relapse, and to the recurrence of scaly, papular, and tubercular patches is sometimes disheartening. Finally, the gouty diathesis seems to predispose to the development of nervous symptoms in syphilis, both of the rheumatic order in early disease (pain), and to lesions of bone, of fibrous tissue, and, later on, of nerve-substance, such as furnish the different forms of paralysis.

Scrofula, on the other hand, leads to moist eruptions in syphilitic poisoning, the vesicular, pustular, early and late ulcerative. Most of the lymphatic glands become involved, but they are usually not so markedly indurated. The eruptions are often slow in coming out, and slow in getting well. The cicatrices of ulcers are not so liable to be deeply pigmented; they are often somewhat irregular, puckered, ridged and drawn like the scrofulous cicatrix, unlike the round, depressed, smooth, thin, glistening, non-adherent, characteristic cicatrix of syphilis. The type of the whole disease is apt to be slow, chronic, pustular, ulcerative, inveterate, often attended by destructive bony lesions. Again, in a syphilitic patient, a gland may suppurate, and then ulcerate with all the appearances of struma about it, and yet yield only to anti-syphilitic treatment.

GENERAL CHARACTERISTICS OF SYPHILIDES.—All the syphilitic affections of the skin have certain general characteristics which stamp them as a class. Every mark is not possessed by each eruption, yet the majority belong to each and every syphilitic lesion of the skin. They are usually well marked, and may be grouped under ten heads:

1. Polymorphism of the initial lesion.
2. Rounded form of the patches of eruption, and of the ulcers.
3. Livid color, like the meat of raw ham, then coppery (pigmented), then gray, then white.
4. Absence of pain and itching.
5. Earlier eruptions superficial and generalized, usually symmetrical.
6. Later eruptions in groups, involving the cutis vera.
7. Scales white, usually not adherent, superficial.
8. Crusts greenish, black, irregular, thick, adherent.
9. Ulceration with abrupt edges, adherent, not undermined, sluggish, and bleeding easily.
10. Cicatrix rounded, depressed, thin, non-adherent, white, smooth at first, often pigmented, then clearing off from the centre toward the circumference.

To these special characteristics may be added for the earlier outbreaks, the general accompanying phenomena of syphilitic fever, alopecia, headache, osteocopic pains (worse at night), analgesia, anæsthesia, indolent lymphatic ganglia, iritis, sore-throat, and mucous patches in, upon, or around the natural orifices:

1. *Polymorphism.*—This applies to the earlier and generalized eruptions. With other cutaneous diseases, it is the exception to have an eruption composed of many elementary lesions; with syphilis it is rather the rule. An erythematous syphilide is usually also at the same time partly papular. The papular furnishes examples of erythematous spots, and very often some vesicles, some pustules, and some scales, and so of the other generalized eruptions. This is partly accounted for by the fact that the elementary lesion often develops in successive crops, and therefore shows during its different stages as an erythema, a papule, a vesicle, a pustule, a tubercle, or a scaly spot. One lesion, however, always exists in excess, and from this lesion is the eruption named—as, papular syphilide.

2. *Rounded Form.*—In a generalized eruption the groups of elementary lesions are gathered into rounded clusters, but this is more specially shown in the later circumscribed syphilides, be they groups of

papules, vesicles, pustules, tubercles, or indeed ulcerations. The tendency to a rounded form of the group is marked.

3. *Color.*—The color of the syphilides is not a frank, inflammatory red, but a vinous, empurpled redness, resembling, when well marked, the raw meat of ham. This color is found also in many of the gouty, papular eruptions, and in psoriasis, rarely with other eruptions. The color of the syphilides passes by pigmentation from the dusky, violet-red, into what is known as copper-color, and from there on sometimes, by a deep pigmentation, to brown or black, the skin around the lesion being usually also pigmented to a certain extent. This pigmentary coloration sometimes lingers for years, but usually clears off after a few months, disappearing first centrally, the clearing off extending peripherally in all directions. Finally, the spot becomes brilliantly white.

4. *Pain and Itching.*—The syphilides are not accompanied by any itching or pain; neither the eruptions nor the ulcers ordinarily furnish any disagreeable subjective sensations. Occasionally there are some heat and prickling with an eruption as it is coming out, but it never amounts to actual itching. Syphilitic ulcerations are also free from pain, except as occurring upon dependent portions of the body, where the imperfect circulation tends to set up some inflammation around or in the throat, where the constant motion seems often to lead to the same result. This absence of subjective phenomena is of great importance in diagnosticating syphilitic eruptions. Errors, however, are liable to occur with gouty and scrofulous eruptions, most of which are also entirely devoid of pain or itching. Other features, however, distinguish the latter. Sometimes eruptions are seen which, although evidently syphilitic, are yet attended by itching. In such cases an attentive inquiry will usually disclose the cause of the exceptional peculiarity. The patient may be found to have a naturally irritable, itchy skin, a pruritus which always troubles him, and which the syphilitic eruption by no means relieves. He may be afflicted with urticaria along with his specific eruption. Not uncommonly, in hospital patients, prurigo from pediculi coexists with some syphilitic exanthem.

Case XLIX.—In a curious case observed at the Charity Hospital of this city, the patient had chancre and gonorrhœa. He took by mistake an overdose of copaiba for his gonorrhœa, whereupon copaibal roseola developed, which itched terribly, causing the patient to leave the marks of his nails on many parts of his body. The copaibal erythema was just subsiding when a syphilitic roseola declared itself, the marks of nails were still upon the patient's body, and he believed that his present eruption was the same one he had been suffering from, and consequently asserted positively that it itched. Obervations, however, proved the contrary, for, as the syphilitic roseola developed, and the copaibal exanthem decreased, all itching ceased.

Contrary to the rule, the earlier syphilitic eruptions of the scalp are usually attended by itching.

5. *The earlier eruptions* are distributed habitually all over the body, and are superficial, mainly congestive in character. There is no alteration, nor any destruction of tissue, as proved by the fact that the earliest eruptions (erythematous and papular) leave no scars. Those coming a little later leave faint scars (pustular and vesicular). The development tends to be symmetrical, the eruption coming out on the flanks and sides of the thorax, the forehead, along the edge of the hair, on the sides of the nape, and the margins of the nostrils, on the palms and soles, etc.

6. *The later eruptions* are grouped; tubercle, pustule, or ulceration, whatever be the lesion, it is now no longer generalized, but gathered into groups; and that the lesion is deep and there is destruction of tissue, are shown by the depression of the cicatrix. These lesions usually leave a scar whether they ulcerate or not, and this distinction of leaving cicatrices without previous ulceration is enjoyed by no other class of eruptions save one, the scrofulous. A tubercular *non-ulcerated* lupus will also leave scars, but such scars are the irregular, stretched, burn-like cicatrices of lupus, and not the round, depressed, white scars of syphilis.

7. *The scales* on the cicatrices, and on the patches of scaly syphilitic eruptions are thin, white, non-adherent, lamellar, very different from the dense, thick, imbricated, adherent scales of psoriasis.

8. *The scabs* formed on syphilitic, ulcerative, rupial, and pustular lesions are rough and adherent, dark-colored, of a greenish black, sometimes loosened by an underlying accumulation of pus, but more often seemingly set into the skin, and tightly adherent. They may be of light color where the lesion has been pustular, but, light or dark, the green shade is rarely totally absent, and is often brilliantly marked.

9. *Characteristics of Ulcers.*—With the exception of the chancre and of the ulcerated mucous patch (both of which may vegetate, and are always liable to be elevated instead of depressed), the ulcerations of syphilis resemble chronic, indolent ulcers. They are rounded or oval, with abrupt edges cut away like those of a chancroid, the base is covered with the yellowish, false-membranous-looking deposit, sometimes bluish, like boiled sago. The edges and base of the ulcer are usually hard, and the former generally, but not invariably, firmly adherent, and not undermined as in the ulcerations of scrofula. These ulcers do not bleed easily, are generally atonic and sluggish, and usually entirely painless. Apparent exceptions to the rule in regard to pain are often due to the dependent position, or other cause sufficient to excite inflammation, or to the situation of the ulcer over a bone, the periosteum of which latter is suffering from painful syphilitic disease.

10. *The cicatrices* of such syphilitic lesions as have destroyed tissue, whether there has been any surface ulceration or not, are generally rounded, very thin, depressed, smooth, shining, and non-adherent. They are usually at first uniformly pigmented, of a coppery hue, more or less deep (nearly black in brunettes). This pigment clears off from the centre to the circumference until only a dark border is left, which some-