of black wash applied. At the end of 6 days no great improvement had taken place, and it was then decided to cauterize the sloughs lightly with nitric acid and open the sinus passing around the urethra by a transverse incision at its base. This was done, and iodoform powder was then liberally applied. Five days after the cauterization a slough was cast, opening into the urethra. With the exception of this the patient made an uneventful recovery. Except for the loss of the skin sheath of the penis, the only deformity of the organ occurred at the terminal part of the urethra, where the glans had been largely eaten away, causing a peculiar doubling of the canal upon itself toward the left. This defect in the urethra persisted. To repair this a plastic operation was necessary.

CHAPTER VI.

SYPHILIS AND ALLIED DISEASES.

Syphilis in Physicians, C. Waelsch[1] claims, can be obviated by reasonable care. He ignores, however, obstetric syphilis and the syphilis from prostatectomy, where dangers cannot always be obviated by prophylactic antiseptics.

Syphilis and Dementia Precox. J. Roubinovitch and F. Levaduti[2] have tested the existence of syphilis in dementia precox by the Wassermann reaction and claim that the failure of cephalorachidian fluid reaction demonstrates that the cerebral changes which characterize dementia precox cannot be attributed to treponemic infection. This conclusion, if tested by similar failures in the tertiary stage of indubitable lues, is too strongly put. The type of the psychosis here comprehended under that *omnium gatherum,* dementia precox, is not given. It is not stated whether the cases tested are paranoid dementia, katatonia or hebephrenia, although the last seems most probable. Paranoia and hebephrenia are indubitably arrests of development and even in cases with luetic ancestry might not show any reaction. The congenital and acquired types of non-specific lues are ignored. Three cases gave the reaction but other luetic antecedents were lacking.

Syphilis in Locomotor Ataxia. W. A. Pusey[3] reports a case of locomotor ataxia with later syphilides. The patient, a 43-year-old cabinet maker, denied any infection. In 1894 he complained of "rheumatism" pains. In 1904 he began to have lancinating pains and soon after a girdle sensation; difficulty in walking in the dark and in telling the position of the limbs appeared. In 1908 slow urination

(1) München. med. Woch., April 13, 1909.
(2) Gaz. des Hôp., June 3, 1909.
(3) Jour. of Nerv. and Ment. Dis., July, 1909.

followed by incontinence occurred. Sexual desire disappeared in 1905. The first syphilide, an ulcer, appeared on the neck in 1906. When examined by Pusey, there were Argyll Robertson pupils, absence of deep reflexes in the legs, extensive analgesia and marked ataxia of the legs with loss of sense of position. When the patient first consulted Pusey there was over the front and inner side of the right ankle an egg-sized tumor with an oval punched-out ulcer at its center. There was no bone involvement. The tumor was a gumma with a broken down center. On the right shoulder was a lesion with a polycyclic convex ulcerating border, behind which was a palm-sized area of thin scarring. On the left wrist, right side of the chest and at several other points were serpiginous ulcerating syphilides. All healed under mercurials in 6 weeks. Various parts of the body showed similar serpiginous ulcers. The case raises the question of luetic reinfection in tabes. Sexual desire disappearance is often preceded in tabes by satyriasis and accompanied with perversions. The possibility of non-luetic tabes like non-luetic paretic dementia must also be taken into consideration.

Serology of Syphilis. R. C. Watson[1] asserts in defiance of both pathophysiology and of reported cases that Wassermann serum negative reaction means that there is no syphilis or that it is latent. In an early case a negative reaction makes the chances from 95% to 100% against syphilis; in a suspected secondary case from 90% to 100%; in a suspected tertiary case from 75% to 95%; in a suspected latent case from 50% to 75%; and in a suspected parasyphilitic case from 70% to 80% against syphilis.

Wassermann's Reaction in Scarlatina is reported by H. Holzmann[2] in a 16-year-old girl. The reaction ceased 4 weeks after the onset.

Syphilis Without Demonstrable Primary Lesion is discussed by H. Waelsch,[3] who analyzes 4 cases of it in physicians. In all of them secondary luetic phenomena, including fever, sore throat, eruption, etc., were noticed, although

(1) Medical Record, Aug. 29, 1909.
(2) Münchener med. Woch., April 6, 1909.
(3) Münchener med. Woch., April 20, 1909.

a chancre had never been observed. The circumstances were such that failure to observe the primary syphilitic effect could not be considered. These cases lead Waelsch to accept the French *syphilis d'emblée*. He then discusses luetic infection among physicians acquired in professional duties, and cites 6 such cases which formed 50% of extragenitally acquired syphilis observed by him in 10 years. The seat of the primary lesion was the fingers, the disease usually beginning as paronychia, which proved quite obstinate when treated by the usual measures. This course of the lesion and the development of lymphadenitis usually led to a suspicion of the true nature of the case. The course of the disease was in all instances a benign one. Waelsch is, indeed, inclined to doubt the assertion that syphilis acquired extragenitally is very malignant. As prophylaxis against such syphilitic infections he warns against too much manicuring, which ften leaves small wounds that serve as points of entry for the infection. In the presence of any larger cuts and abrasions of the skin the use of gloves is imperative in all surgical and obstetrical procedures. Treatment of any wound acquired in operating upon a suspected syphilitic should be thorough cauterization with the actual cautery; if a needle has entered the flesh it may be connected with an electric battery and the tissues about it destroyed by the current.

Treponema (Spirocheta?) Pallidum. According to B. White and O. T. Avery[1] the staining of Shereschewsky is best suited and most satisfactory for general use. Treponema pallida presence in a given lesion establishes its luetic character. Its absence does not exclude lues. [These last claims are the usual unscientific pedagogic dicta characteristic of certain bacteriophiliac minds. The presence of tubercle bacilli in a healthy person's throat does not demonstrate tuberculosis. Their absence decidedly creates doubt of tuberculosis. The crucial test of Koch's law has not yet been fulfilled by the treponema. Until it is, special pleading like that cited is waste of time. The probabilities are in favor of the treponema as the germ of syphilis, but this has not yet been demonstrated beyond doubt.]

(1) Arch. of Int. Med., III, 5.

Treponema Pallidum in Urine of Secondary Syphilis. Barch and Michaum[1] have found the urine of acute nephritis during secondary syphilis containing the treponema pallidum. The patient had also vaginal mucous patches. The treponema, as M. Queyrat pointed out, might have come from the vagina. The treponema pallidum, moreover, was not definitely differentiated from the treponema refringens frequently found in the mouth and genitals.

Chemical Prevention of Syphilis in the Rhesus Monkey. According to S. Flexner and B. T. Terry,[2] it is easy to produce the primary lesion in monkeys. This can be prevented by local measures, such as 2 or 3 grains of atoxyl. After the visible syphilide has appeared this measure is also effective. These animals are not protected against subsequent inoculations, those in which the disease is arrested as late as 15 days after the primary lesion is started being subject to further inoculation just as are normal animals. In other experiments, inoculated animals were subjected to treatment 6 months after the production of a lesion. Two drugs may be used, acetoatoxyl and mercuric salt of atoxyl. The lesion in an animal yielded, partially at least, very quickly to acetoatoxyl. The effect was controlled by the serum test, the reaction being very slight after the first dose had been given. Recently the test has become positive, hence the animal is not yet fully cured. In an animal which survived 2 weeks after treatment by the mercuric salt of atoxyl the lesions reduced somewhat. This salt is extremely disagreeable to use because of the terrific reaction in the tissues induced by it. In addition to the local reaction there was also stomatitis and abscess of the parotid. This would make its use in man objectionable.

Syphilis From Industrial Implements. S. Snell[3] reports the case of a man who consulted him for cycloplegia. Seven years before consulting him he had worked as a glass-blower and had to use the same tube as two other men. He developed what appears to have been a chancre at the back of the throat (tonsil). This was followed by

(1) Gaz. des Hôp., July 22, 1909.
(2) Medical Record, May 1, 1909.
(3) British Medical Jour., Dec. 5, 1908.

a rash on the chest, and his hair fell out. At this time working with the patient was a man suspected by his mates of having syphilis. The man in question denied that it was syphilis, asserting that it was *only* the "clap." The manager told the patient that he would not be harmed, but he said, as a preventive he washed out his mouth with water. In addition to this patient, two men working at the same place were infected, both having the chancre in the throat. The infector then left these works, and entered those in a neighboring town. It was stated to Snell that he had infected other men there also. In consequence of these infections the trade was notified by circular, and the man was prevented from working. Snell's patient infected his wife, and thus more than 4 innocent persons were infected by one case originally venereal.

Neisser claims that the danger of inoculation by infected instruments must be small because the virus dies very soon after removal from the body. This applies to most of the supposed dangerous sources of non-venereal syphilis, but the case of a glass-blower's instrument is a particularly dangerous one in this respect. The blow-pipe is passed from mouth to mouth without any precautions whatever. In one case cited the blow-pipe is used at the present time by three men on the day shift and three on the night, namely, the gatherer, the glass-blower and the wetter-off.

The liability of syphilitic infection from the passage of the blow-pipe from mouth to mouth has not escaped Schmidt, who quotes Eysell as having described 12 infections from 1 case, and in 6 of these the chancre was inside the mouth and in 6 only on the lips. Schmidt remarks that syphilis contracted in this way must be looked upon as an industrial accident, and would therefore be liable to compensation. Glass-blowers' syphilis has long been recognized in the United States. Cases occur frequently. Bulkley, in his "Syphilis Insontium," cites quite a number.

Mercurial Reaction in Syphilis Diagnosis. F. Curioni[1] submitted 20 non-luetics and 30 luetics to mercurial treatment, ascertaining first that the kidneys were normal in all. At 11 a. m. he injected into each 0.01 mercury bichlorid

(1) Lancet, Dec. 15, 1908.

in 1 c. c. of distilled water. The urine was first collected at 7 p. m., then at 12 p. m., then at 9 a. m. The specific reaction in the three equal samples was then tested by the following procedure: Place in 200 c. c. of urine previously acidified with a few drops of hydrochloric acid 8 gm. of copper wire, well cleaned and cut in small pieces, allowing this to remain for 3 hours, taking care to agitate the liquid occasionally, then decant the urine and wash the copper wire well first with distilled water, then with alcohol, and finally with ether. (In doing so it is necessary not to shake the copper too much.) Next place the washed copper on blotting paper to dry easily; afterward place in a test-tube quite clean and dry and close this with a plug of cotton; now heat gently the bottom of the tube until the wire becomes slightly brownish, then allow to cool; when quite cold reject the copper and drop in a tiny piece of iodin, heat again gently the bottom of the tube in such a manner as not to develop the iodin vapor too strongly. In the presence of a mercurial salt there will be formed on the cool part of the tube small crystals of yellow iodid of mercury and also red bi-iodid. The chemical reaction is easily understood. It is necessary to follow exactly the directions and to place the tube at the moment of the reaction over something white in order to make the slightest trace of color visible; to an unaccustomed eye it may be difficult to distinguish between the violet-red vapor of the iodin on the one hand and the straw-yellow of the iodid or the bright red of the bi-iodid on the other, especially as the quantity is so infinitesimal. It is well to practice beforehand with a weak solution of mercurial salt until one is accustomed to distinguish between the colors. It is most necessary that the tube should be quite dry, because otherwise the iodin vapor dissolving in the small particles of water adhering to the tube will color them and will in this way interfere with the exact appearance of the reaction. The quantity of iodin should be very small, just visible to the eye; otherwise the too abundant vapor will alter the reaction completely. Take care not to heat the top of the tube, or the vapor, not being able to sublime, will escape into the cotton-wool plug. To obtain a delicate reaction, gold in grains should be substituted

for copper, proceeding in identically the same way. Reaction in the urine of the healthy is much more than in the syphilitic, in which sometimes there is none; which means that the elimination of mercury in the urine of the syphilitic is always much slower than in health. The mercurial reaction is *nil,* or nearly so, in cases of syphilis recently contracted, especially when symptoms are apparent; and the reaction is only slightly evident, and never so well as in normal cases, in the syphilitics in whom 2 or 3 years have elapsed since the appearance of the ulcer. Finally in cases of long standing, of 10 or 12 years, the mercurial reaction is as evident as in normal cases.

In the subject of syphilis, the mercury introduced unites itself in a special organic combination with the virus, for which, being a specific remedy, it must have a special affinity, and in this condition it does not pass, or passes only with difficulty, the renal filter, and at the same time does not have any offensive action on the organism. Thus in this fashion it would be easy to understand the old empiric advice to wait before commencing the general cure until the secondary symptoms have appeared and remain in view for some time. Lesser, who had occasion to analyze the phenomena from this point of view, had the conviction that the morbid evolution is milder and more regular if the general treatment is commenced rather later and not before the secondary symptoms.

Curioni accepts this view of Lesser and believes that a too early treatment is inadvisable, because the action of the antigen being paralyzed by the mercury, the production is stopped of the special antibodies which would be the natural defense of the organism provided for the true destruction of the virus. When the virus is already in subjection to the specific antibodies (in old syphilis), or is absent, or the mercury has been given in excess, the mercury passes freely through in the urine.

On the other hand, the rapid elimination in the pseudo-syphilitic is probably due to a vital tendency of the organism to expel whatever is noxious to it. For whatever concerns the tolerance to mercury observed in the pseudo-syphilitic is at least in the beginning of the treatment. Therefore it lasts only until the special antibodies of the

mercurial antigen have not come to paralyze its poisonous action. Boeri has experimentally demonstrated this new form of immunity acquired by the organism. Salmon said about the therapy: "Sometimes in the course of the therapy of syphilis first treatment is followed by a rapid improvement, and a second, third and fourth series becomes less and less beneficial. It is convenient to alternate mercury with atoxyl and *vice versa.*" It is more probable that the antitoxic reaction which proceeds in the organism against these special poisons neutralizes their therapeutic action.

Bites of Syphilitics. The bites of syphilitics[1] constitute a variety of extragenital infection, examples of which are occasionally observed by the physician. An example of this sort is given in a medical journal in which it is stated that a young man called at the office of a physician, was angry and asked the physician the reason that had led him to make certain remarks concerning himself. Some words were exchanged on the matter and finally the physician proceeded to throw out the offended individual. The latter at once gave the physician a slap and bit his thumb, inflicting a wound which of itself could not have had any serious results. But the physician knowing that his aggressor had syphilis in the contagious stage, feared contamination, as a result of the bite. In a medical sense, the matter was easily possible, and, for this bite, he asked for heavy damages. The judges gave a very light fine to indemnify the wounded physician. This is a matter of record now and it becomes a very bad as well as a serious precedent in similar cases. Naturally, the fault lies with self-constituted experts instead of those who should be known for their attainments as well as knowledge of the subjects upon which they are asked to testify.

Acute Syphilitic Meningitis. The predilection of syphilis for the central nervous system is well known, but usually the lesions have a chronic evolution, such as those found in general paralysis, locomotor ataxia and chronic meningitis. It is an error to believe that the influence of syphilis is limited to these effects, because it may give rise to

(1) Amer. Jour. of Derm., June, 1909.

acute processes; and acute meningitis, which of recent years has been carefully investigated in France, is one of its most important acute manifestations. Raoul de Coux[1] describes two types of acute syphilitic meningitis, namely, the acute secondary and the acute tertiary meningitis. The first mentioned type is characterized by its early appearance and is usual coexistence with cutaneous eruptions of a distinctly secondary nature. It is the clinical manifestation of meningeal reaction, which is only made evident at this period by a lymphocytosis of the cerebrospinal fluid.

The coexistence of the clinical and histologic meningeal reaction with cutaneous eruptions might lead one to suppose that they correspond to a true meningeal enanthema. Clinically one is dealing with a diffuse meningitis without any phenomena of localization and quite similar to the ordinary form of tuberculous meningitis, and it is from the latter affection that the diagnosis must be made. A cure can usually be wrought with mercurial treatment, and no pathologic sequel occurs. Lymphocytosis of the cerebrospinal fluid is always present and is usually very marked. A recent autopsy by Sézary showed that the lesions were disseminated and consisted in an infiltration of lymphocytes with circumvascular congestion.

Acute tertiary meningitis is quite different and undergoes its evolution in a rather latent way. It is characterized by very marked symptoms, such as acute delirium and convulsions, and by symptoms of a diffuse meningeal reaction and signs of localization, such as partial epileptoid attacks and paralysis of the limbs, face or eyes. These phenomena may result in death, but they usually undergo regression, leaving behind various sequelæ and symptoms of chronic meningitis. The diagnosis between tertiary syphilitic meningitis and an attack of meningitis during general paralysis is often very difficult, and so is that of tuberculous meningitis. A conclusion, however, may be reached if the patient's history is carefully gone into. The acute accidents during syphilitic meningitis are due to congestive outbreaks arising around the sclerogummatous lesions. Both these types of acute syphilitic

(1) N. Y. Med. Jour., Aug. 21, 1909.

meningitis have, consequently, quite a different prognosis. The secondary form can almost always be cured without leaving sequelæ, while the prognosis of acute tertiary meningitis must be more reserved, because it often leaves behind permanent lesions of the nervous system. In both, an intense mercurial treatment should be carried out.

Complement Fixation Test in Lues. According to A. Fleming,[1] this test requires only a very small amount of the patient's blood, such as may be drawn into an ordinary blood capsule as for an opsonic index or a Widal's test, and thus obviates the necessity of drawing off blood from a vein with a syringe, while at the same time making it easy for a blood sample to be sent to a laboratory for the test to be done. It does away with the use of an animal immunized to sheep's corpuscles as in Wassermann's test, or to human corpuscles as in Noguchi's modification. This process of immunizing an animal is a tedious one. Thus the only thing one requires to get frequently is the sheep's blood, which can readily be obtained anywhere twice a week or oftener from a butcher. Except syphilis, the only disease in which a positive result is at all constant is leprosy. M'Intosh reports 145 observations and concludes that Wassermann's reaction possesses a sufficient degree of specificity to make it of considerable value from a diagnostic and therapeutic point of view. Apparently certain extracts of congenital syphilitic livers give the most consistent results. While the antigen cannot be kept for any considerable period without losing to a large degree its specific qualities, the serum may be kept some weeks without losing any of its properties if it be kept sterile. A marked positive result is a certain sign of a syphilitic infection, but a negative result does not always mean that no infection exists or has existed. At present it is not possible to give a definite opinion as to the influence of the treatment on the reaction, or as to what extent the reaction can be used to indicate whether sufficient treatment has been given or not, as the results obtained seem to differ in almost every case. But one can say, as a rule, that the more complete the treatment has been, the less

(1) Lancet, May 29, 1909.

likely is one to find the reaction present some 2 years after the infection. Energetic treatment should be commenced at once after a positive reaction has been obtained in every case, without waiting for the development of further symptoms. Bayly describes his technic, which is a modification of Neisser's technic, as follows: A rabbit's heart is stripped of pericardium and washed free from blood with normal salt solution. Two grams of heart tissue are minced and pounded and ground into a cream and made up to 20 c. c. with absolute alcohol and well shaken. After 24 hours this may be centrifuged and the clear alcoholic extract removed. Considerable time is saved and perhaps greater accuracy obtained if complement, heart extract, and normal saline are mixed in bulk (instead of separately in each test tube) and then measured into the test tube and the serum added. By this method there are only 2 pipette measurements instead of 4. He has used 3 controls, 1 normal serum, 1 certainly syphilitic serum and 1 without any serum. He has used 2.5 c. c. normal saline, 0.2 c. c. heart extract and 0.1 c. c. fresh guinea-pig serum (complement), and mixed these in bulk in a sterile flask. After shaking well, he places 2.5 c. c. of this mixture in each of 20 small test tubes and adds 0.3 c. c. of either decomplementized serum to be tested, or control serum, or control saline without serum, respectively. The tubes are then placed in an incubator at 37 degrees C. for a half hour. A dilution in normal saline of rabbit's serum that has been rendered hemolytic to sheep's corpuscles is then prepared of such a strength that 1 c. c. of this dilution when added to 1 c. c. of a 7.5% suspension of sheep's corpuscles will just produce complete hemolysis when incubated for 5 minutes at 37 degrees C., thus using velocity of reaction rather than the end point as his guide. For each serum to be tested and for the three controls 1 c. c. of a 7.5% suspension of sheep's corpuscles and 1 c. c. of the diluted decomplementized hemolytic serum are taken and mixed together in bulk (= hemolytic system). There is plenty of time to estimate the hemolytic power of the serum and to prepare the correct dilution and mix the dilution of serum and the suspension of corpuscles while the tubes of heart extract, serum and complement are

undergoing their one and a half hour's incubation. After this complement fixation period in the incubator the tubes are removed and 2 c. c. of the hemolytic system are added to the contents of each tube, and the tubes are well shaken and replaced in the incubator for 2 hours, when they are removed and placed in an ice chest for 12 hours, after which they are examined for the reaction. The amount of inhibition of hemolysis will be found to vary and any definite inhibition of hemolysis he has taken as a positive reaction, while only those tubes that macroscopically show complete hemolysis have been considered to give the negative reaction.[1]

Precocious Gummata. It is, remarks the *American Journal of Dermatology,* classic to look upon syphilitic gummata as a late manifestation of syphilis. It is usually about 3 or 4 years after the chancre is seen that they appear. But this is not always the case. Gummata may appear during the first or the second year of syphilitic infection. Logeay points out that these are precocious syphilitic gummata.

Syphilitic Reinfection. According to D. Bourysdorff, a 24-year-old student contracted a glans chancre, indurated and accompanied by painless adenitis. A roseola and cephalalgia coexisted with the primary lesion. So far as treatment was concerned he received three series of subcutaneous mercurial injections. Each series consisted of 40 injections. Besides these, he ingested about 70 grams of potassium iodid. Two years after this first chancre, and but 2 months after the end of the third series of mercurial injections, he had a new infection and on January 15, 1908, a new indurated chancre of the glans with inguinal adenitis. On January 25 the serum of the chancre was taken up by means of Bier's apparatus. Smears made of the serum and stained with Giemsa blue permitted the recognition of 10 to 20 treponemas in each mount. On January 30, roseola made its appearance. On February 16, complete cicatrization of the chancre had taken place.

Reinfection, according to J. Hutchinson,[2] may occur in 18 months. Its length is inversely proportional to the

(1) Jour. de Med. et de Chir., May, 1909.
(2) Lancet, May 29, 1909.

success of the treatment of the first infection. It may be more severe or lighter than this.

Extragenital Syphilis in Children. C. Leiner[1] reports 6 cases of extragenital syphilis in children. In the first a 5-months-old child had been infected by his dry nurse. The mother had been suffering from psoriasis for years. As the child showed the first symptoms at the age of 4 months, the mother and attending physician thought the eruption psoriasis. The treatment of daily baths and rubbing in sulphur ointment had been of no benefit. The child, in spite of good nourishment, became anemic, was restless, cried much, both day and night, and showed no increase in weight. When the child came under Leiner's care, he found its body covered with an exanthem consisting of round, slightly elevated spots of a red-brown color. He had no hesitation in declaring that the child was suffering from syphilis and not, as supposed, from psoriasis. Some of the spots on the face showed slight desquamation but never in the same manner as is seen in psoriasis. The glands in the neck were easily felt; the cubital glands were enlarged. On the left side of the upper lip was a brown, round, elevated, slightly indurated spot, suggesting the primary infection. The examination of the mother revealed non-specific psoriasis. The father and the three children showed no symptoms of a specific infection. The nurse had on both tonsils and on the mucosa of the mouth gray patches surrounded by a red area and on the body a dispersed macular exanthem. The child was given calomel daily for a month or longer. Under this treatment the child was cured. The nurse was sent to a hospital for specific treatment.

In the following case Leiner could not trace the origin of the infection: An 8-months-old child was brought to the Caroliner children's hospital with an exanthem covering the whole body, either of a peculiar character or in the form of roseola. The glands in the neck and over the ulnas were swollen. On the upper lip was a highly infiltrated patch of the size of a dime, covered on the surface with thin, brown-red, moist crusts. After removing the crusts

(1) Amer. Jour. of Derm., May, 1909.

the infiltration showed an ulcer of a grayish white color with some little secretion. The part closely surrounding the ulcer was swollen and infiltrated. The submaxillary glands on the right side were enlarged and easily felt. The mucosa of the mouth and of the pharynx showed no abnormality. No severe constitutional symptoms, besides a slight anemia, could be noticed. The child was the first and only one; there had been no previous miscarriage. Neither father nor mother showed suspicious symptoms. The treatment consisted of an inunction of unguentum hydrargyri. The exanthem began to disappear at the end of the first week.

The third case was that of a 10-year-old girl who had long been known in the hospital as a Mongolian idiot and who had been many times examined previously and never showed any symptoms of syphilis. The patient was brought by her mother on account of a typical syphilitic macular-papular exanthem, acquired through an infection a few weeks earlier. The mucous membrane of the mouth was attacked by the eruption and was covered with white-gray annular or semiannular patches. A probably primary sore was found on the left side of the nose, an ulcerated infiltrated lesion surrounded by an inflammatory areola. The mother showed a typical syphilitic exanthem on the body and eruption in the mouth.

The family lived in the poorest conditions; the lodgings consisted of one small room and a kitchen. In the room the parents and the child lived and the kitchen was let to a man who was suffering from syphilis. Through him the mother had been infected and she in turn had infected her husband. The child had been probably infected either through direct contact with the parents through sleeping in the same bed with them or from the utensils used and infected by them. The child was treated in the Caroliner hospital for children by inunction with unguentum hydrargyri.

The next case, in a child of three years, had previously been diagnosed as measles. The exanthem was dispersed over the whole body and consisted of a papular eruption of a brownish red color, some single spots showing a light desquamation. Although the single patches, on superficial inspection, showed a distinct resemblance to the efflorescence of measles, the whole appearance of the eruption differed widely from that disease.

The absence of catarrhal infection of the mucosa, the good general condition of the child, the normal temperature, the distinct brown efflorescence of a marked infiltration and, last but not least, the long persistence of the eruption, refuted measles. On the left cheek the child had a small tumor similar to a scrofuloderma, but more infiltrated and surrounded by an infiltrated zone. The center of this swelling was slightly ulcerated and covered with a crust. There was undoubtedly the point at which the syphilis had entered primarily. The mother had been infected with syphilis some months before and treated in a hospital by inunction with mercury. The mother showed a typical leucoderma on the neck, multiple swellings of the glands and mucous patches in the mouth.

The last two cases were boys of 12 and 7, with the primary affection of the left tonsil. On inspection of the mouth an intense swelling of the tonsil, edematous with infiltration of the left palate, attracted attention. On the tonsil was to be seen a deep ulcer covered with dirty gray membranes. The submaxillary glands of the left side were extremely swollen and infiltrated. These appearances alone cannot always be charged to syphilis at first glance, as another similar affection is rather frequent in children, *ulceromembranous tonsillitis,* a quite harmless non-specific disease.

Previous to Schaudinn's investigations, it was sometimes difficult to differentiate between these forms of tonsillitis, and only through a further observation showing the eruption of an exanthem could the diagnosis be made. Bacteriological examination cannot be taken as a reliable differential diagnostic method, because in both forms are to be found the same microorganism, the bacillus fusiformis—Vincent—with the treponema refrigens, both being almost always present in necrotic membranes of the mouth. Besides the non-specific treponema refrigens in the syphilitic affection, the specific treponema pallidum—Schaudinn—is present. Side by side, the distinction between them is not easily possible. In such a dubious case it

is advisable to puncture the swollen lymph nodule. In syphilis the presence of treponema pallidum can be demonstrated without difficulty after some little experience. Both cases showed a typical papular exanthema on the whole body. In the course of the disease a rare complication, double orchitis, occurred. The exanthem and the orchitis disappeared after treatment with mercury. The parents of both children were healthy. In one case the child had been infected by the gardener, who was suffering from syphilis and who took his meals with the boy.

The fourth case shows how easily syphilis may be contracted by quite innocent persons forced to live under unhygienic coniditions.

Triple Veneral Infection from one coitus is rare. A case of this has lately been reported.[1] The patient was a man who appeared rather indifferent to his state of infection, having entered the hospital merely for bronchitis. It was only through a close and complete examination that the discovery was made that he had a gonorrhea with a considerable purulent discharge in which the gonococci were numerous; besides this he had a suppurating balanoposthitis with phimosis which, however, permitted of the discovery of an erosion indicative of a chancroid. Besides, an examination of the pus showed an abundance of the characteristic Ducrey-Unna bacilli. The infectious coitus dated back about 2 months and was the only one. But the question could be asked if, in addition to gonorrhea (which on the other hand was singular on account of its indolence, the patient never having had pain in urination, a thing which occurs in most cases) and outside of the simple chancre, he did not also contract a syphilitic chancre that was hard to recognize in that inflammatory and indurated mass. The induration, in the chancre, is a good characteristic of the syphilitic nature of the lesion, but it is often difficult to determine and it can hardly be considered as pathognomonic in such a case, except in certain localities in which its characteristics may be easily noted. But aside from this sign there is a special one which almost never fails and this is the induration of the inguinal glands. This adenopathy, usually bilateral, not painful,

(1) Amer. Jour. of Derm., May, 1909.

consisting of separate ganglia which roll under the finger, and not adherent, is really pathognomonic, for it is only found in syphilis with these characteristics. Now in the patient, it was typical and it presented all the characteristics that Ricord was the first to describe and whose study was perfected by Fournier. Its constancy is almost absolute, as this last author states that in 5,000 city patients observed by him, who had syphilis, he has observed the primary bubo which he called the "pleiad of Ricord," fail in but 3 cases. So that under those conditions the patient was considered syphilitic and treatment by means of daily injections of biniodid of mercury was inaugurated at once. It was but a few days later that a very discrete roseola was discovered upon the sides only of the chest and it was found because it was sought with care, and after all lasted but 4 or 5 days. Roseola is, at times, very ephemeral; however, this fact, here, may perhaps be attributed to the very early treatment which may even prevent any eruption at all. In a recent case in care of a colleague this occurred, and that which proved that the patient really had syphilis was the fact that he transmitted it to his wife. There is some advantage, when a diagnosis is made certain, in treating the patient as soon as possible; for in that manner we mitigate or totally suppress certain symptoms, in some cases at least, for there are many in whom this preventive action does not show itself. In the case just detailed, double phlebitis declared itself but was finally overcome.

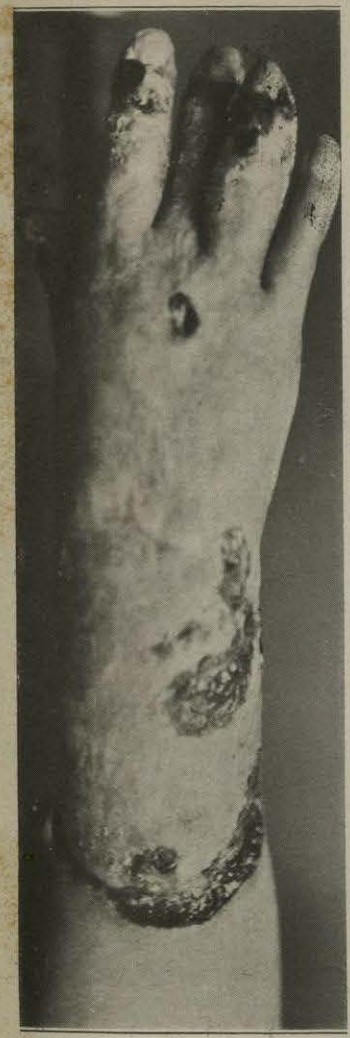
Gumma Contagion is reported by M. Verel[1] from a patient who in April, 1900, had a chancre followed by roseola and secondary symptoms. As no symptoms occurred during the years that followed, marriage was decided upon in 1905. On April 29, 1905, he married a perfectly healthy virgin. In July, 1905, the man felt pains in the glans and saw developing at the place which had been the site of the chancre a small swelling which softened, suppurated and healed without treatment. October 13, 1905, the young wife presented a hard edema of the left labium majus, without showing the trace of a chancre, but with vulvar papules, buccal mucous patches

(1) Amer. Jour. of Derm., May, 1909.

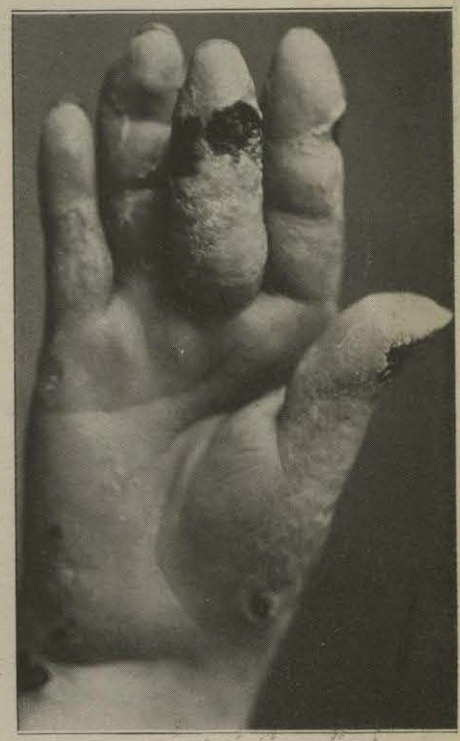
and a pregnancy apparently in the fifth month. She was placed under mercury salicylate injections. November 29, 1905, she returned, having borne a dead child of eight months. The post-mortem examination of this child did not reveal syphilitic lesions, and presence of treponema pallidum could not be established. During the time following her confinement the woman showed syphilitic symptoms which appeared in abundance, and the injections were resumed. Verel saw the woman later. Treatment of the symptoms continued till October 24, 1906.

Eyelid Chancre. Charles Pache[1] reports indurated chancre of the eyelid. It was impossible to determine the possible mode of infection. Contamination at a distance by a stream of saliva would be a particularly disheartening method of acquiring syphilis. It may, perhaps, be admitted that, under certain conditions, the *Spirocheta pallida* may penetrate through a mucous membrane without a solution of continuity being visible in the latter. The question is certainly an interesting one. On the other hand, we note another case of an analogous nature which is remarkable for its etiology. The case occurred in an Arab, in Algeria, who, a month previous to the report, had his eye scratched by a thorn which entered that organ. At the time of examination he presented on his conjunctiva a round, indurated lesion, which at once aroused the idea of a syphilitic chancre. Inquiry elicited the fact that a few hours after the penetration of the foreign body, the thorn was removed by two Moorish women who, successively, passed their tongues in the upper conjunctival cul-de-sac. This procedure of licking is commonly employed in Algeria, among the natives, as it is in Russia among peasants, as well as in other European countries, for the removal of foreign bodies in the eye. In Algeria there are certain Moorish women who have acquired great dexterity in this disgusting practice. After the thorn had been removed the patient felt relieved at once and for 2 or 3 days he felt no more inconvenience. Three weeks later the pains recurred, becoming more marked day by day, the eye became injected, weeping, and at the end of 10 days had attained the swelling seen when he was ob-

(1) Amer. Jour. of Derm., May, 1909.



Dorsal Aspect.



Palmar Aspect.

PLATE IV.

Ulcero Gummatous Syphlide—Syphilitic Dactylitis

Occurring in an American clerk, aged 25; infection 7 years ago; beginning of present lesion 4 years ago; healing process has been rapid under hypodermic injections and internal administration of "mixed treatment" combined. *(From the Dermatologic Clinic, Post-Graduate Medical School, Chicago.*