When the tissue is thin and natural, the hook may be readily pushed through it; not so when it is thickened, as is often the case in squint of some standing, or when there has been inflammation of the conjunctiva; indeed, when so changed, I have seen it mistaken for muscle, and treated as such. I conclude by applying one or two sutures, using such a needle as that depicted in the chapter on instruments; but one carefully adapted generally suffices. This is very readily done by raising the corneal portion of the membrane with the forceps, transfixing it close to the margin, and dealing with the other edge in the same manner. I am particular about the exact position of the suture, lest there be any tension of conjunctiva; and because, when so placed, the thread is thrown off in three or four days, which is better than having to remove it. Not the least irritation ensues, and the patient is rarely ever aware that he has a stitch in his eye.

In the subconjunctival operation, the conjunctiva is divided horizontally at the lower part of the eyeball, and the hook and scissors are employed beneath the membrane. A larger aperture is required than I find necessary for the other. My objections to it are, in the first place, as regards the uncertainty of thoroughly dividing the muscle where the eye is sunken; when there is fixed inversion of the eyeball; when the muscle is shortened; in the small eyes of children and infants; when the conjunctiva is thickened and thrown into folds, and especially when the sub-tissue is likewise altered. Then, as regards the peculiar consequences, the parts are very much disturbed, the conjunctiva is freely separated, and blood is extravasated.

It is a common practice to make a counter puncture to attempt to let the blood out; but, in fact, little can be removed in this manner, because of the coagulation. I have seen very extensive chemosis and ecchymosis thus produced, even in the hands of the best operators. I have read of the effusion being so considerable that the eyelids closed with difficulty. The uncertainty of dividing any condensed tissue about the muscle that should be severed, or of any posterior adhesions, must be self-evident, and need not be dwelt on.

The use of the suture must set at rest all the objections about dividing the conjunctiva in a line with the caruncle, as rapid primary adhesion is thereby produced. It is the rare, the very rare exception not to have this. I cannot, therefore, conceive a more efficient and perfect manner of operating. The little ecchymosis, the slight redness, and the rapid removal of all trace of the operation, point to this. There is no fungous growth from the edges of the wound, a likely occurrence whenever the conjunctiva does not heal at once, and no irritation, which is common in the progress of granulation.

Failure of the operation is often due to bad operating. The operator should, therefore, be careful to divide the muscle entirely; to be certain of which, he should always ascertain, by the reapplication of the hook, that no muscular fibres have escaped; and, after the efficient performance of this part of the operation, should the eye still be adducted, he must seek for adhesions, and separate any that may be found.

There is no difference in the details between the operations for internal and for external squint, beyond that, the attachment of the external rectus muscle being a little more posterior than the internal, the conjunctiva should be divided a little further from the cornea. The hook should be passed just below the muscle, and close to its attachment to the sclerotica; or the inferior oblique muscle is liable to be taken up. The operator must be prepared to find the conjunctiva and the subjacent tissue looser and thicker on this side of the eye; and then the tendon of the muscle does not admit of being so definitely raised and exposed as in the internal operation, in consequence of being broader; it appears more like fascia than tendon. The operation may, therefore, be said to be the less easy of the two; and there can be no doubt that it is far more likely to be ineffectually performed. I always apply sutures, for, although less important here, still they are very serviceable.

I understand that some of the warmest advocates for the subconjunctival operation do not apply it to external squint. I have not seen it adopted.

Of course, all that has been said respecting care in dividing the internal muscle and seeking for adhesions, must be understood with reference to external squint.

FOREIGN OPINIONS OF THE NATURE OF SYPHILIS.

Collected by M. Berkeley Hill, F.R.C.S., M.B.Lond.

V.—Ricord of Paris.

Having detailed the opinions of several continental *doctrinaires* in syphilis, I may be permitted to conclude the series with a short relation of Ricord's views on the subject, as related in his *Leçons sur le Chancre* (2nd edition, Paris, 1860), and reiterated in his lecture delivered in the Hôtel-Dieu on a case of syphilis supposed to have been contracted through vaccination. This lecture was reported in the *Gazette des Hôpitaux* for January 28th and 30th, 1862, and is the latest occasion on which he has professed his opinions.

Many years ago, in his early writings on syphilis, Ricord separated gonorrhœa from other venereal diseases, but upheld in his celebrated *Letters* the doctrine of Hunter that all venereal ulcers were provoked by a common poison. In the eighteenth letter, he wrote: "So far, have we every reason to suppose there is but *one* syphilitic virus. It appears to me reasonable to consider that chancres, which under certain conditions to be produced at will begin in the same way, are also generated by a single cause; and that their later developments owe their characters to the individual peculiarities of the persons affected." Again, in his nineteenth letter, he said: "If my meaning was comprehended in my last letter, you will have perceived that I acknowledge the syphilitic poison to be single, although experiment has not yet placed it beyond doubt. Nor do I seek to explain the varying severity of this poison by attributing to it different degrees of virulence—an explanation put forward by some observers; but rather by a modification of its effects induced by the peculiarity of constitution of the person affected. Also, in spite of Bell's observations and of those of others, no one is justified in concluding that a severe case of syphilis generates a contagious principle which will cause severe forms of the disease where it is inoculated, because our observation teaches us that the opposite is frequently the case."

Until the year 1856, Ricord continued to profess opinions in harmony with those enunciated in his early letters, and in accordance with those of Hunter; notwithstanding that Bassereau in 1852 published his treatise on syphilis, in which he declared his conviction that venereal ulcers were of two kinds, propagated by two distinct contagious principles. At length, in his clinical lectures of the year 1856, Ricord struck his colours as a unicist, and declared he should henceforth fight in the dualist squadron—a promise which he has redeemed most thoroughly, but still refuses to countenance the leading syphilitic writers in many of their pretensions: for instance, the power of contagion possessed by secondary forms of syphilis generally, or by the blood of syphilised persons; though he has lately shewn symptoms of a disposition to accept the former of these dogmata. In his *Leçons sur le Chancre*, published in 1857, and republished with copious notes and additional observations by M. Fournier in 1860, he commences with a quotation to the effect that the foolish man is he

who never changes, or who prefers obstinate adherence to his opinions to truth itself. Ricord then gives his solemn declaration of his acceptance of the doctrine of the existence of two contagious principles causing venereal ulcers, as different in their origin, mode of action, and consequences, as are the poisons which produce small-pox and dissecting wounds; the first infecting the system, and accompanied during its period of activity by a series of symptoms dependent on general constitutional affection; the second being simply a poison confined in its course and consequences to local irritation.

Ricord describes the different sores in a series of propositions so framed as to contrast the characters peculiar to each, as follow:

The Simple or Non-infecting Chancre. 1. The tissues in which it developes itself retain their normal softness and pliability. It is essentially a chancre with a soft base. The inflammatory complications which now and then accompany it may give its base a more or less perceptible hardness, but this hardness differs to the touch from that of an indurated ulcer; in short, it feels like a boil. Ricord endeavours to distinguish the two kinds of induration more clearly; but he acknowledges that the two varieties of hardness are sometimes so similar that it is impossible to separate them.

2. This sore is, as a rule, multiple, either from the outset or shortly afterwards, through inoculation of its acrid pus on contiguous surfaces; in which case the secondary sores are in all respects repetitions of the first. Fournier enumerates two hundred and fifty-four cases of simple chancre, of which forty-eight had but a single chancre, thirty-two had two ulcers, one hundred and sixteen had from three to six ulcers, forty-one had from six to ten ulcers, seventeen had from ten to twenty ulcers.

3. The surface of this chancre is hollowed out as if by a punch. It has margins which are perpendicular or somewhat undermined. Its floor is uneven, worm-eaten in appearance, nodular, and greyish in colour. It suppurates freely, and is seated on somewhat congested tissue.

4. Its pus is contagious in the highest degree, and is so during the greater part of its course, frequently even until cicatrisation is almost completed. It is readily inoculable on its bearer. Ricord holds this characteristic to be the only really pathognomonic sign of its presence.

5. It is a chancre of long continuance (the average duration being a few weeks); it heals with difficulty, and easily assumes a phagedænic progress.

The Infecting or true Syphilitic Chancre. 1. Its progress is insidious; its base is indurated in a special and pathognomonic manner.

Induration. The time of its appearance, Ricord expressly states, *never precedes* that of the ulceration, thus contradicting Babington and von Bärensprung, who hold that induration precedes ulceration. Ricord attempts to account for this discrepancy by supposing other observers to have overlooked the ulcer, which may have been very small, or disposed of in various ways, none of which are at all satisfactory. This induration subtends and extends beyond the base more or less; it generally dips deeply into the subjacent tissue, and has consequently been likened to half a pea or marble deposited in the cutis vera; it is usually unaccompanied by pain or tenderness. This form may be taken as the classical one; but there are three other varieties—*a.* The parchment-like, when it exists in an extremely thin layer just beneath the ulcer; *b.* The irregular, from being seated on tissues of different density (as at the juncture of the skin and mucous membrane); *c.* The annular, when the indurated matter is deposited in a ring-like form.

The induration commences to form at the end of the first week after inoculation, and becomes evident in the second week, being never perceptible before the third day, and rarely delayed beyond the second week. Ricord has never observed it later than the third week. By this it will be manifest that Ricord ignores any incubation stage.

The situations where induration is best marked are the groove behind the corona of the glans penis, the skin of the penis, and the labia; in short, the localities best supplied with lymphatic vessels. In these regions, the induration is also most persistent. On the other hand, induration is often wanting on the vagina, caruncule myrtiformes, anus, etc.; and, more rarely, on the orifice of the urethra. Here it is only the parchment form that is met with; and the induration is often late in its appearance, and short in its stay. With these localities excepted, Ricord believes that induration forms as well in women as in men.

The ordinary time for the induration to last is eighty days, but it frequently lasts some years; and Puche had a case where it lasted nine years.

2. The infecting chancre is usually *solitary*, rarely multiple. Of 356 infecting chancres, 241 were single, and 15 multiple.

3. The ulcer of the infecting chancre is generally less sharply cut out than that of the simple chancre. It appears as if formed by a scoop, and is cup-shaped; that is to say, the margins slope gradually down to the floor. The margins are not undermined, though often raised. The floor is most commonly smooth, glazed occasionally, even iridescent, but of greyish brown colour. This ulcer secretes but little pus, which is thin, serous, often sanious.

4. The pus of the infecting chancre soon loses its virulent specific power, especially for the bearer of the sore, whose body is in a few days at most, if not before, insusceptible of inoculation with the pus. When more than one chancre is found in one person, they are of the same age—very rarely indeed, if ever, inoculated one from another successively.

5. The infecting chancre has little tendency to enlarge; it soon reaches its acme, and passes on to cicatrisation. Consequently, these sores frequently heal before they have been observed by a patient who is not very scrupulously clean. Phagedæna is very rare with this chancre.

Relative Frequency of the two Sores. The simple chancre is by far the most frequent variety. According to the statistics of the Hôpital du Midi, it occurs in the proportion of three or four simple sores to one infecting chancre. Fournier quotes from Virchow's work on *Constitutional Syphilis* the observation of British army surgeons, who, after having employed simple treatment for primary venereal affections, remarked that constitutional symptoms occurred about once in every four cases.

This superiority in frequency of the simple over the infecting chancre is due partly to the facts that there is no immunity from it, while repetitions of indurated chancres on the same individual are excessively rare; and that it retains its inoculable power for a longer period. Fournier relates H. Lindmann's experience. "I have", says this gentleman, "made a series of inoculations on myself with the pus of simple chancres, and still continue them. I kept an accurate account as far as 2,200, since then I have omitted to count them; but possibly I have performed 500 more. Not one of these inoculations failed to produce a simple chancre."

Seat of Chancres. Ricord and Puche, both lately surgeons of l'Hôpital du Midi, have never observed a single case of simple chancre on the head or face. Other French writers on syphilis have seen this variety in those situations, but not more than in a few instances. The simple sore, when situated on these parts, always heals rapidly. Fournier, in a note, relates the experiments of Puche and Bassereau, in which a series of inoculations of simple chancrous pus, performed on the face and various

parts of the head, never failed to produce a soft chancre, constitutional symptoms in no instance succeeding. He has collected also the histories of 150 cases of chancre on the head, all of which were indurated and syphilitic.

Transmissibility of Simple Chancre to Animals. The evidence on this point is chiefly negative. Ricord admits its possibility, but asserts it to be very difficult.

The infecting chancre may affect any part of the body; the head, of course, being a rare site, as are any but the genital organs and the nipples.

Buboes of the Simple Chancre. The simple sore is not necessarily accompanied by a bubo. In 207 cases of simple chancre noted by Fournier, 65 only were complicated with bubo. This bubo is acute in its nature, and of two kinds—that of irritation, and that of absorption. Both varieties have no definite time for making their appearance. The first is a simple inflammation and congestion of the gland, ending with or without suppuration; if suppuration supervene, an abscess results, which behaves similarly to an abscess elsewhere. The bubo from absorption is caused by some of the contagious fluid being carried along to the nearest lymphatic gland, and is introduced into its interior, where it produces suppuration and formation of an inoculable pus, which, when it touches the tissues between the gland and the surface of the body, converts the abscess resulting from its irritation into a simple chancre, with characters similar to those of the original sore, except, of course, that it is much larger.

The Bubo of the Infecting Chancre is a painless indolent enlargement of the lymphatic glands, those nearest the sore being most increased in size. Several are always attacked, not merely one or two, as in the bubo of the simple sore. The induration is similar in its anatomical character to that around the chancre. With these glands suppuration is rare, being not the consequence of the disease itself, but of accidental irritation.

This bubo makes its appearance within a certain period during the first or second week after contagion, accompanying or closely following the induration of the sore. It is of long persistence, lasting weeks or even months after the primary chancre is healed. The induration of the glands is never absent, is of gristly hardness, and the groups in both groins are usually affected.

Origin and Transmission of Chancres. 1. The simple chancre comes from a simple chancre, and can propagate only similar sores, if it have been transferred from a non-syphilised individual. By that, Ricord means a person who has not already been infected with syphilis from an infecting sore; as, should its secretion have been produced on a syphilitic person, it may be contaminated with syphilitic fluids, and hence be wrongly supposed to have caused syphilis in its new victim if he show signs of that disease.

2. An infecting chancre always propagates itself on non-syphilised individuals as an infecting chancre.

3. A contagion from an indurated chancre gives rise in a syphilitic person to a soft-based chancre. This soft-based chancre is in appearance similar to a simple chancre. This, however, is but rarely seen, through the difficulty of propagating syphilitic pus on a syphilised person.

4. It is a matter of observation that a non-indurated chancre on syphilised individuals causes sometimes simple or sometimes infecting chancres when inoculated on non-syphilised persons. For this Ricord offers no explanation.

5. A phagedænic chancre may proceed from a chancre having no phagedænic character. Phagedœna is only a complication, and its presence indicates no peculiarity of its source of contagion, but depends on particular conditions of the individual.

6. The simple chancre is, while at its height, unfailingly inoculable to its bearer.

7. The infecting chancre at its height has lost its power of inoculation on its bearer; or, at least, with the rarest exceptions.

Prognosis. The two varieties of ulcers are, in respect of the prognosis, perfectly distinct. The indurated chancre is, if local troubles are alone considered, the more benign of the two; it causes little irritation, seldom becomes phagedenic, is usually solitary, and soon reaches the healing stages. Very different are its characters when the constitutional effects are included. Its induration is but the earliest phenomenon of a general diathesis, the outset of syphilis. As soon as induration is present, the disease is acquired. It is a consequence, and not a forerunner of the constitutional taint. In the simple chancre the ulceration forms the whole disease; the constitution is uninfected; when the ulcer is healed the disease is gone.

The number of indurated chancres has no influence over the severity of the constitutional symptoms. One small ulcer is as efficient as several large ones. Hence, the prognosis of an indurated chancre is that of syphilis.

Condition of the Blood. The poison is carried into the system, probably, by the blood; but this is one of those questions in which observation is yet wanting. The blood, though it undergoes itself the influence of the poison, has no contagious quality, and cannot serve as a vehicle of the disease by inoculation in another subject. (This assertion, it may be remarked, is at direct variance with the opinions and results of experiments of various other syphilitic writers: Sigmund, Rollet, von Bärensprung, for example.)

From analysis by Ricord and Grassi of the blood of syphilised persons, we learn that the corpuscles are diminished and the fibrine increased in syphilised persons; in the blood of persons affected by simple chancres, no appreciable change occurs. The administration of iodide of potassium quickly restores the blood corpuscles to their normal proportion.

Mucous Tubercles. The simple and infecting chancre can alike pass into a stage of irregular increase and form growing prominent spongy vegetations, which, when partially cicatrised, resemble the growths called condylomata, or "plaques muqueuses."

These vegetations may easily, remarks Fournier, cause great errors of diagnosis when they result from simple chancres. They, when thus originated, preserve their auto-inoculability, or inoculability on the bearer, and being mistaken for plaques muqueuses, or mucous tubercles consisting of altered syphilitic ulcerations, lead to the belief that this constitutional affection is inoculable on the bearer. Also, on the other hand, the simple chancre is thus supposed to sometimes precede secondary symptoms; namely, this spurious plaque muqueuse is mistaken for the genuine mucous tubercle.

Further, the infecting chancre, as Ricord explains, can undergo changes *in situ*, being really transformed into a mucous tubercle without previously cicatrising; and because the general diathesis prefers all points of irritation for the production of its manifestations, and an unhealed chancre, erosion, wounds, etc., afford favourable site. If this change is to take place, the primitive characteristics gradually disappear, and are succeeded by secondary ones, in such wise that a well characterised chancre in course of time becomes a well formed mucous tubercle. The induration also may have either completely disappeared, or may remain well marked.

These anomalous changes of the simple and infecting chancres into mucous tubercles, resembling, in their external characters, the mucous tubercle of the secondary series of syphilitic eruptions, have led some authors to describe mucous tubercles as primary affections, and to suppose that syphilis may originate in a mucous tubercle.

Constitutional Syphilis. Usually, three groups of

symptoms, marking three epochs of the disease, succeed each other.

1. The primitive chancre and its bubo.

2. Secondary affections ordinarily appear from five to six weeks after inoculation; never later than six months, or earlier than fourteen days. If the progress of the disease have been influenced by treatment, the interval between the first and second periods is prolonged. These consist of the usual appearances, loss of hair, neuralgic pains, superfiical affections of the skin and mucous membrane, etc.

3. Tertiary affections, which are rarely perceptible before six months, and may be delayed many years. They affect the deeper tissues and organs, and consist of tubercles of the skin, sarcocele gummy tumours of the cellular tissue, muscles, and viscera.

Affections of the Fibrous and Bony Tissues, etc. This course of symptoms is not followed absolutely; some of the later symptoms mingle with the earlier ones, or the latter reappear among the later ones in many cases.

In addition to the blood, Ricord holds that the spermatic fluid, the milk, or any other physiological secretion, is unable to convey it without admixture of a pathological secretion of a primary sore, because inoculations of these fluids have failed on their bearers. He bases his judgment on these observations:—

1. In all cases, and their number is by no means a small one, in which individuals free from syphilis have been inoculated, under the conditions necessary for the performance of a scientific experiment, with secretions of secondary or tertiary affections, the results have been negative; insomuch as an ulceration similar to a primary affection has never been obtained; neither has any form of disease similar to that which has furnished the pus for inoculation succeeded.

2. Nevertheless, in order to exclude some experiments which have produced doubtful results, he frames his law as follows. The inoculation of secondary or tertiary syphilitic products on syphilitic individuals is always sterile. A law, which is doubtless true, but which has no reference to the contagious power of the secondary secretions, because, as Ricord himself presently proves, a patient who has been infected with syphilis cannot be affected a second time. The disease in this respect resembles small pox, etc. Also, in a note, and more lately in a lecture delivered in January 1862, Ricord allows that inoculations of the secretions of secondary sores have succeeded in producing syphilis in persons otherwise virgin from syphilis; but he maintains that the mucous tubercle is the only secondary eruption capable of secreting a contagious fluid; and that the blood is not infectious under any circumstances.

In conclusion, it may be assumed that Ricord is convinced that the virus producing the indurated sore does, when inoculated, always produce constitutional symptoms; and that when these are wanting the syphilitic virus has not been applied; but some other irritating contagious principle. Again, that the contagious principle is furnished most abundantly in the primary form of the disease; that the secondary forms are very defective in contagious power, the mucous tubercle being probably the only one of these forms possessing such a property. Also, that the blood, and with it the other physiological fluids, is incapable, when unmixed with a syphilitic secretion, of transmitting the disease. This opinion is contradicted by the observations of Diday, Rollet, von Bärensprung, etc, and by the experiments of Rollet, von Bärensprung, Gibert, and others.

Ricord is quite at variance with other observers regarding the fact of a period of incubation for the poison existing before any action takes place about the seat of inoculation. That Ricord is wrong in this respect, the two cases of von Bärensprung's already described show tolerably satisfactorily; and they are borne out by those of other experimenters.

The question of an incubation period for the virus is passed over in silence in the last lecture; so we may conclude his views in this respect are unchanged.

The induration, according to Ricord, does not precede ulceration. This is again contrary to the observation of Rollet and others. Still the evidence on either side is not sufficient to allow of a positive conclusion being drawn. That a breach of surface is invariably necessary for absorption, Ricord thinks; but he is not so positive on this point as Sigmund and von Bärensprung. The infecting chancre Ricord holds to be inoculable on its bearer during a certain, probably very short, period of its existence; this quality, if real, is very difficult to reconcile with the long incubation the poison has already made in the system, so it is to be hoped that this characteristic will soon be determined to be falsely attributed to the infecting chancre. The mixed chancre may have been experimented with, and by its auto-inoculability have led Ricord into error.

The chancre with a soft base which is formed on a syphilised person is another stumbling-block; but its rarity, and the probability that when it transmits syphilis it is contaminated with the bearer's secretions, would permit us to suppose that after all the chancre formed was only a simple chancre.

VI.—Clerc of Paris.

M. Clerc, surgeon to the St. Lazare Venereal Infirmary at Paris, and a former pupil of Ricord, has enunciated some speculations as to the origin of the contagious principle of the soft chancre. He is inclined to separate the infecting from the soft chancre as completely as Ricord or Rollet; but he thinks the contagious principle of soft chancres was originally the same as that causing syphilis, but that it has lost its power of producing a constitutional influence from being propagated on persons already syphilised, and who, therefore, no longer afforded a suitable ground for the reproduction of the syphilitic poison, consequently the irritative quality of the virus alone remains.

The simple chancre has, in his opinion, the characters assigned to it by Ricord, so that it is unnecessary to recapitulate them.

To the infecting chancre he does not give quite the same character as Ricord. Induration, he says, is more frequently absent than present in women, but generally present in men. The induration sometimes precedes, sometimes succeeds, ulceration; but these processes have no direct relation to each other. There is a stage of incubation of probably three weeks duration before the local symptoms declare themselves; its exact length is still undetermined. A characteristitic diphtheritic exudation covers this ulcer, quite unlike the pus of the non-infecting chancre. Infecting chancres are, at no period of their existence, inoculable on their bearer; and for this reason, that the system is affected during the incubation period. M. Clerc has never inoculated persons virgin from syphilis with the poison of infecting chancres; but he has made experiments with infectious diseases having similar characters, such as vaccine, glanders, and sheep-rot. He has vaccinated children by means of a single puncture into the skin, and one hour after the inoculation destroyed the wound and surrounding tissue with solid nitrate of silver; but the children at the usual time had the symptoms of vaccinia, and a second vaccination failed in producing any effect. At the Veterinary School of Alfort, horses have been similarly inoculated with glanders, and the wound cut out one minute later, but the glanderous poison had already been absorbed; also, sheep were treated in like manner with the poison of the rot disease, with the same result. Considering the extreme rapidity with which these poisons are absorbed into the system, Clerc thinks that there is no period in which the syphilitic virus can be eradicated from the infecting ulcer.

The infectious nature of fluids exuding from secondary sores is fully believed in by M. Clerc. The secretions probably owe their infectious power to admixture with the blood of the patient suffering from them, which blood is itself capable of conveying the contagion. The vaccine pus does not contain the syphilitic poison when produced on syphilitic children, unless there be mixed with it some blood; then it will confer syphilis when inoculated on others. The pus of simple chancres acts similarly when similarly treated; and then it produces the mixed chancre of Rollet, which form Clerc thinks is nevertheless clinically rare. There are as yet no data for determining the length of the time during which the fluids of a syphilitic person are contagious. M. Clerc is engaged on a treatise on syphilis, in which he will publish his observations and opinions of the nature of disease; in the meantime, he has read a few papers before the medical societies of Paris on the subject, from which, and from his oral communications to me, I have collected these particulars.

These descriptions of the opinions of some foreign labourers in this department of pathology have made it evident that the old views of syphilis are no longer supported by the majority of those most familiar with venereal disease; and though a considerable amount of truth has been sifted from error, there yet remains a vast deal to be done and undone before this most perplexing and intricate question is finally solved.

Progress of Medical Science.

Influence of Hypertrophy of the Heart and Diseases of the Cerebral Arteries in the Production of Apoplexy. Dr. A. Eulenburg has investigated this subject statistically in a prize thesis presented to the Medical Faculty at Berlin. In 42 cases of sanguineous cerebral apoplexy, abnormal conditions of the arteries at the base of the brain—hardening, calcareous deposits, and fatty degeneration—were found in 29: in 13 cases only were the large cerebral arteries free from disease. In 9 of the 42 cases there was hypertrophy of the left ventricle. Of the 29 cases in which disease of the cerebral arteries was present, there was also more or less extensive endocarditis in 17, alterations of the valves of the heart in 19, and hypertrophy of the left ventricle in 6 only. Dr. Eulenburg hence draws the conclusion that disease of the cerebral arteries is a much more frequent cause of apoplexy than cardiac hypertrophy. (*Virchow's Archiv*, and *Wiener Medicin. Wochenschr.*, 6 September 1862.

Hemeralopia accompanying Intermittent Fever. Dr. G. Kozeluk relates the case of an Austrian soldier under his care on account of tertian ague, who on the days of the paroxysms, towards sunset, was attacked with hemeralopia—being then perfectly unable to see. Nothing abnormal could be discovered in the eyes on examination by the ophthalmoscope. The intermittent fever was arrested by full doses of sulphate of quinine; and the hemeralopia ceased at the same time. (*Spitals Zeitung*, 25 October 1862.)

Carbuncular Eruption occurring in the Course of Typhoid Fever. Dr. Labalbary relates the case of a boy aged 14, who had had a severe attack of typhoid or enteric fever with cerebral complications. He had passed through the most dangerous phases of the disease, but convalescence was not established, when a carbuncular eruption suddenly manifested itself on the fifty-third day of the disease. Twenty-five or thirty carbuncles, varying from the size of a nut to that of a hen's egg, appeared on the calves of the legs, on the buttocks, on the back, along the whole length of the vertebral column, on the head, on the ankles, and even on the soles of the feet. They were very painful; and, on being laid open by the bistoury, each gave exit to three or four spoonfuls of pus on an average, and discharged a large core. The neighbouring tissues were livid, and had a gangrenous aspect. Dr. Labalbary applied Labarraque's disinfecting solution twice daily to the affected parts, and dressed them with dry charpie charged with powdered cinchona and vegetable charcoal. In a fortnight, the carbuncles disappeared gradually and completely; and, about a week later, the patient was quite convalescent; but his mental faculties remained dull for some days, he being unable to remember the names of persons and things. (*Gazette des Hôpitaux*, 16 Octobre 1862.)

Salts of Tin in Gonorrhœa. Injection of trisnitrate of bismuth was two or three years ago recommended by some French surgeons as a remedy for gonorrhœa. The high price of this article has led M. Calvo to make some investigations into the efficacy of salts of tin; and he has arrived at the conclusion that the oxychloride, the phosphate, and the tannate of this metal may be advantageously substituted for bismuth. He uses eight *grammes* of oxychloride, six *grammes* of phosphate, or two *grammes* of tannate of tin, in one hundred *grammes* of rose-water. An injection is made three times a day. (*Union. Méd.*; and *Gazette Méd. de Paris*, 25 Octobre 1862.)

Circumscribed Swelling of the Sterno-mastoid Muscle in Newly-born Infants. Dr. Melchiori has called attention to an induration of the sterno-mastoid muscle which is sometimes found in young children. Four examples of it have come under his notice. Some time after birth, it is observed that the infant has difficulty in performing certain movements of its neck, and that at the same time it suffers more or less severe pain. On examination, there is found in the sterno-mastoid muscle a hard fusiform swelling, sometimes of rather large size. In all the cases which Dr. Melchiori observed, the swelling disappeared by resolution, and the muscle regained its functions. At first the disease appears to be inflammatory, and emollients are indicated; afterwards, an expectant treatment is sufficient. Dr. Melchiori thinks that this condition may, perhaps, be attributed to compression of the muscle, and laceration of some of its fibres during labour. The editor of the *Gazette Hebdomadaire*, in noticing the remarks of Dr. Melchiori, mentions that he had lately seen a case of the kind. (*Omodei Annali;* and *Gazette des Hôpitaux*, 23 Octobre, 1862.)

The Pelvic Articulations during Labour. Dr. Laborie ends a first memoir on this subject with the following conclusions:—1. Although it is very generally admitted that the pelvic articulations acquire a certain degree of mobility during labour, the value of this mobility is much disputed. 2. All anatomists in the present day agree in ranging the sacro-iliac synchondrosis and the pubic symphysis among arthrodial joints; but, from researches made chiefly on the pelves of recently delivered females, Dr. Laborie believes that they present the characters in part of enarthroses, the articulating surfaces being convex in one direction and concave in the other, and in part of ginglymi, their movement being limited to one direction. 3. The influence exerted on parturition by the mobility of the pelvic articulations is very small or almost null at the inlet of the pelvic. 4. It is only when the child has entered the pelvis proper (*petit bassin*) and when it presents at the outlet, that the mobility of the pelvic joints plays an important part. 5. The mechanism of enlargement of the outlet is very simple. As its diameter is less than that of the inlet, provision must be made to allow the child to perform