Gouty Melancholia.

women. The greater impressibility and movability of their nervous systems, their fuller emotional nature, and their larger subjectivism lay them more open than men to the disturbing influences of retained waste, and I am greatly impressed with the belief that many of the anomalous nervous affections with which women are afflicted, at the turning period of life, have a gouty origin." "Well, after all this pathological talk about the patient,

we must come to the practical question of what is to be done with him. What have you to suggest, doctor?"

#### (To be continued.)

Marriage and Hereditariness of Epileptics. By M. G. ECHE-VERBIA, M.D., late Physician-in-Chief to the Hospital for Epileptics and Paralytics, and to the City Asylum for the Insane, New York, &c.

Arethæus asserts that several physicians, and among them the famous Asclepiades, observed that venery cures epilepsy developed at the age of puberty. The same opinion was professed by Scribonius Largus, and, with these authors, the corruption of retained semen originated the spasmodic malady in such cases. Alfarius à Cruce, commenting on these primitive ideas, contends that, in similar instances, the change of age effects the cure improperly attributed to venery. His pupil Sinibaldi, declares venery powerless against fits, exploding after the age of fifteen, especially in adults, or individuals of an advanced or old age. But in epilepsy à putrescente, upon seminal retention, venery may prove of such great moment as to occasion altogether its cure.\*

This belief has prevailed until our days, acrimony of retained semen acting, according to Tissot, + as a powerful irritant of the organism in those instances of venereal epilepsy due to prolonged continence, and these views have been held by several other French writers.

The preceding notion has not prevented the recognition of venereal excesses among the principal causes of epilepsy by Actius, Galen, Arethæus, and subsequent authors. Moreover, a kindred resemblance was supposed between epilepsy and coitus, the former being not infrequently induced during

- \* "Geneanthropeia." Romæ, 1643, p. 886, C. † "Traité de l'Epilepsie." Lausanne, 1785, p. 73, §26.

the latter, which was compared by Democritus to a slight seizure  $\mu_{i}\chi\rho_{i}$   $\epsilon\pi_{i}\lambda_{\eta}\psi_{i}a$ , or, as Faustus has described it—

#### "Turpis, et est morbi species horrenda caduco."

A young man, observed by Schenck,\* always saw a woman offering herself lasciviously to him, during his epileptic paroxysms, ended by seminal emission. The same author refers, besides, to a case in which Salmuth (Cent. i., obs. 99) remarked convulsions of the testicles during the fits.

Either as a practical result of this supposed essential participation of the genital organs, or of those in regard to the hurtful influence of the retained and corrupted semen, emasculation has been, from early times, employed as one of the remedies for epilepsy, still empirically tried in desperate cases. Eunuchism did not exist in the Greek or Roman Republics, except as spontaneously self-practised by the priests of Cibeles and of Diana Ephesi. But the Roman Emperors introduced it from Asia, about three centuries after the Republic, and, it seems that emasculation against epilepsy was used by Cœlius Aurelianus, † and was copied from him by E. Platerus and Mercatus.

Heurniust performed the operation on several of his patients. and his practice is favourably cited by Sinibaldi and other classical authors of the seventeenth century. The celebrated Jean Taxil, who flourished during the latter part of the sixteenth century and the beginning of the seventeenth, says :---"Some have advised eunuchism to cure such malady (epilepsy), though I believe not intending to cure it thereby, but to prevent its transmission to offspring." Hector Boethius leaves no doubt as to such having been the declared object of the custom among the primitive Scots. "He that was trublit," says he, "with the fallin evil, or fallin daft or wod, or havand sic infirmite as succedis be heritage fra the fader to the son, was geldit, that his infectit blude suld spread na firther. The women that was fallin lipper, or had any infestion of blude, was banist fra the company of men, and gif

\* Joannis Schenchius. "Observationum Medicarum Rariorum." Frank-

truti, 1665, Lib. i., "De Epilepsia," p. 104.
t We are glad that Dr. Bacon has, by resuscitating this practice, drawn fresh attention to it. See Beport of the Cambridge Meeting in "Notes and News."—[EDS].

1 "Opera Omnia, Postrema Editio," Lugduni, 1658. "De Epilepsia." Ch. xxiii., p. 421. § "Traité de l'Epilepsie," etc. Tournon, 1603, p. 229. || "Croniklis of Scotland," trans. by John Bellenden, Edinburgh, 1536, Lib. 1.

she consavit barne under sic infirmity baith she and her barne were buryit quik."

This is the first and only legal measure against the hereditary spread of epilepsy that we have found distinctly recorded, in addition to the incapacity of epileptics to marry, pronounced by the Greek Church, and the local edict forbidding their marriage, issued in the middle of the last century, by Prince Stolzemberg de Hutten, Bishop of Spires. Of these three measures, the first has been the most radical and barbarous. Burton, after justly remarking that it was "done for the common good, lest the whole nation should be injured or corrupted," adds, "A severe doome you will say, and not to be used amongst Christians, yet more to be looked into than it is."\*

The Mosaical and Roman laws make no allusion whatever to the marriage of epileptics. Nor did the Athenians forbid it, who, to prevent the degradation of their race, put to death all children born with any infirmity-a terrible measure which, on the other hand, does not seem to have guarded them against the prevalence of the sacred disease or lues deifica. Among Christians, the spiritual and sacramental nature of marriage consecrated its bonds as indissoluble, and in questions concerning their validity or dissolution, the Church was the supreme unerring judge. Luther and Melancthon proclaimed marriage a mundane affair, not concerning any Church regulation, but the practice in the German Empire continued, notwithstanding this declaration and the schism, without departure from the primitive Catholic canon, until the Emperor Joseph II. introduced into the German statutes the principle advanced in France by Launoy-that marriage is a civil contract, under the exclusive jurisdiction of temporal authorities, the sacrament being a purely accessory thing benevolently added to it by the Church. For this reason we do not find, until the seventeenth century, in countries where the Reformation had been triumphant, divorce laws with special enactments in reference to epilepsy, as it may vitiate or render null and void the marriage. Before considering them we shall briefly notice the older dicta of the Ecclesiastical Court in Rome, which are still enforced in almost every Catholic nation belonging to the Latin race.

In 1588, Michael Syrum and Diana Brandanima, both of Greek extraction, were married in Venice, according to the Greek rite, and

\* "The Anatomy of Melancholy." Oxford, 1621, p. 85.

1880.7

# by M. G. ECHEVERRIA, M.D.

had a daughter who did not live long. In 1602, Syrum being enamoured of another woman, or for some other motive, applied for the dissolution of his marriage, on the ground that he had acted by fear of paternal threatenings, ex metu reverentiali, and because Diana deceived him, concealing that she suffered from epilepsy at the time of marriage. Epileptics are by the Greek rite deprived of legal capacity to marry, and, confident in this, Syrum submitted the case to a Greek Prelate at Venice; but he decided against Syrum, who was equally unfortunate on his appeal to the Auditor of the Chamber that confirmed the sentence. The case was then carried up to the Rota at Rome. This tribunal pronounced the Prelate's decision unanthorized by the Pope, or the Patriarch at Constantinople, whereas the Auditor's sentence was also void for his want of jurisdiction over matrimonial matters. But it did not thereby sustain Syrum's petition, for the supreme decision, besides rejecting the plea of intimidation, and noticing the fact that Syrum could not claim the benefit of the Greek canon while he lived subject to Latin laws, sets out the following no less adverse conclusions in regard to the second allegation in the demand :-

"17.—Epilepsy does not prevent or annul marriage." "21.—It is an erroneous sentence to annul a marriage already contracted, by reason of epilepsy."

"22.-The Roman Church does not tolerate indistinctly the Greek rites in her divine celebrations, but only those approved by the Apostolic See.'

"24.-Neither laws nor customs have any force against divine rights."\*

The above decree of the Ecclesiastical Court at Romethat epilepsy does not prevent marriage-was altogether disregarded when the Prince Bishop of Spires, as previously stated, issued, in 1757 and 1758, an edict to the tribunals of his own dominions forbidding the marriage of epileptics, under severe punishment of those who, by fraud or otherwise, should contribute to its execution. This important enactment is cited by Mahon† and Delasiauve, ‡ but without indicating its bibliographical source, which we have unsuccessfully searched for to see the grounds exposed by the learned Jesuit Bishop for his judicious measure, in opposition to the maxim laid down by the Supreme Roman Tribunal, that epilepsy does not prevent marriage. This maxim reverses older decisions, often applied, of Saint Thomas and other recognized

<sup>\* &</sup>quot;Pauli Zacchiæ Questionum Medico Legalum, etc." Tomus Tertins. Lugduni, 1673, "Decisio, lvii., Rot. Rom.," p. 107. † "Médecine Légale et Police Médicale." Paris, 1807. Tome iii., p. 92.

<sup>Médecine Légale et ronce meutoaic.
Traité de l'Epilepsie." Paris, 1854, p. 530.</sup> 

authorities in the Roman Church, and which, most probably, had greater force not to hinder the edict of the Bishop of Spires. They especially refer to epilepsy as a grave and incurable infirmity, which, like ozena, syphilis, or any other contagious malady, may become a cause to dissolve the espousals or sponsalia, as cited by Sanchez\* and Zacchias,+ in their standard works.

The Greek Church, as just noted, regards the epileptics as incapacitated—inhabiles—in respect to marriage. This law is mentioned by Zacchias, who adds, as it is also asserted by Du Preaut and others, that no impediment is raised by the Greek Church to voluntary divorce.

The terms of the Ecclesiastical Laws in Saxony are quite explicit in reference to epilepsy as a cause for repudiation. Marriage, as stated by Benedict Carpzov, § may be annulled on account of epilepsy, paralysis, or other contagious malady affecting one of the parties; or, when any of said maladies existed already before marriage but was concealed; it being further provided, that, prior to granting the divorce, the circumstances of the case should be prudently considered to ascertain whether both parties were cognizant of the fact and therefore consented willingly to marry; and, before deciding the dissolution of the matrimonial bonds on the plea of any contagious or loathsome disease, time should be fixed to determine positively that this is really incurable.

In the case of Heinrich K., and Kunigunda, the daughter of Daniel E., it was alleged that Kunigunda, on account of epileptic fits, had become unfit for the matrimonial state, wherefore both earnestly prayed to be allowed to have their marriage vows annulled, and the President, Assessors, and Upper Consistory, decreed, the 27 April, 1621, that it should be so granted.

Andrea Bayer, in his supplement to Carpzov's work on Ecclesiastical Jurisprudence, refers to a subsequent decision of the Supreme Consistory, dated October 15th, 1703, and enumerates the incurable and contagious disease therein judged

\* "De Sancto Matrimonii Sacramento Disputationum, etc." Lugduni, 1739. Tomus Primus, Lib. i., p. 106.

.

\* Op. cit., Tomus ii., n. 18, p. 773.
\* "De Vitis, Sectis, et Dogmaticum Omnium Hereticorum, Gabrielem Prateolum Marcorsium," Colonize, 1581. Lib. vii. § 15, p. 203.
\* "Jurisprudentia Ecclesiastica seu Consistorialis." Lipsize, 1731, Lib. ii., Lib. x., p. 268.
# "Additioner ad Depadiati Communication" and the section of the section of the section.

|| "Additiones ad Benedicti Carpzovi Jurisprudentia Ecclesiastica vulgo Consistorialia." Lipsiz, 1732, p. 128.

by M. G. ECHEVERRIA, M.D.

1880.]

cause of divorce, namely-Leprosy, Epilepsy, Phrenesis, Morbus Gallicus, Phthysis, and Hydrops, to which are also referred Apoplexy and Paralysis. Whenever one of the parties shall ignore that the other suffered from any of said diseases before marriage, or when the disease happens subsequently to it, there is cause for repudiation, provided it is the positive judgment of the physician that such disease is contagious and incurable.

Michael Alberti relates another very interesting case tried before the Extreme Consistory, and favourably decided the 17th December, 1736.

The petitioner, a woman, K., applied to the Ecclesiastical Court to make the celebration of her marriage null and void, because her betrothed, U., had epilepsy. The petition sets forth that he had fallen into ill-health, i.e., epilepsy, when young as well as of late years. The Leipsic Faculty was consulted whether such a man, who had in late years been so afflicted, was in danger of becoming attacked again with the above-mentioned epileptic disease, and whether the woman who marries him need be afraid of her own constitution suffering thereby.

In a lengthy Report, in which all the circumstances connected with the case are carefully examined, the Faculty replied : that such cases are very rarely cured. That epilepsy is certainly not contagious : the Faculty does not say that K. will either become epileptic, or that her life must be in danger, but holds the opinion that all the circumstances adduced may easily prove injurious to her health.

The Halle Faculty was also consulted on the case, submitting for their consideration that, when at school U. was struck by the master on the head, and the blow was followed by epilepsy, to which he continued subject thereafter. He was betrothed to K., but before the celebration of the marriage, she began to be afraid of the fits, and dreaded an unhappy marriage. She thought that, under such circumstances, her espousal was not valid or obligatory, but could be dissolved on account of such a severe disease. She asks the Faculty's opinion, as her lover has not (from being treated medically) had fits for two years. The Faculty, in reply, express the fear that anxiety of life and matrimony will renew the attacks, particularly because the marriage act is very injurious to epilepsy, or to those who were formerly affected with epilepsy. Considering that coitus is already called by some authors a slight epileptic fit, which affects either the brain and the whole generative functions so as to render the subjects impotent, or unfortunate parents, by conveying to their children an incurable disease; therefore is applied to this case the principle established by Stryck and Nicolai in regard to impotency as a cause for the dissolution of espousals. The Faculty concludes, that it cannot be maintained, with

consistency, that U. is entirely freed from epilepsy, and that one must fear rather, from manifold causes, and particularly from the restraint and anxiety of married life, a severe relapse. Petition granted.

There was subsequently an appeal from this decision, but no judgment appears to have been given as to the propriety of marriage. All that the statement signed by the judge amounts to is, that U. was then (17th December, 1737), sound in health, and able to work like other young men.\* The inference is that the judgment was reversed.

The laws of Denmark do not differ from those of Saxony. They provide among the various causes for repudiation or nullity of marriage, that-" § 74, n. 7. If it should be discovered that the husband, or the wife, has concealed some secret disease, as for instance, leprosy, epilepsy, or any other kind of contagious or loathsome affection, existing before they united in marriage, their divorce, if wished, may be granted. But, should he or she become afflicted with any of such maladies after celebration of marriage, a certain length of time should be fixed on to employ suitable remedies to expel the malady, and if the diseased person is unable to do it, the marriage then should be declared void if so petitioned." +

The Ecclesiastical Law of the Church of England makes no especial reference to epilepsy as a cause to invalidate or annul marriage. The common law treated the marriage bond as indissoluble, until 1857, when the Statute 20 and 21 Vict., c. 85, took away from the Ecclesiastical tribunals all civil jurisdiction over the subject of marriage and its incidents, conferring it entirely upon courts of justice, with jurisdiction to grant divorces à vinculo matrimonio. We are not aware, however, of epilepsy having been ever interposed as a cause for divorce, nor that it has invalidated in Great Britain, a contract of marriage, under the modern resolution of the civil courts, that the marriage of a lunatic not being in a lucid interval is absolutely void. Although epileptics are not legally considered as lunatics, they not unfrequently fall into a condition in which they accomplish their acts automatically, in an unconscious manner, that necessarily vitiates them and renders them not binding in law. We shall presently cite a recent case in which marriage would have been consummated under these circumstances, if it had not

\* "Michaelis Alberti Jurisprudentia Medica." Lipsiæ, 1737. Casus, xxiv.,

tomo quarto, p. 490, et casus xxv., tomo quinto, p. 649. † "Begis (Gloriosiss. Memoriæ) Christiani Quinti Leges Danicæ." Trans. into Latin by Petrus A. Höyelsinus, Hauniæ, 1710. Lib. iii., p. 270.

1880.]

by M. G. ECHEVEBEIA, M.D.

been prevented, at the very moment of celebrating the nuptial rites in the church, by the relatives of the epileptic.

This irresponsibility appears distinctly recognized in the case of Abbot Gatus, \* subject to violent epileptic fits, and who, under the influence of one of his attacks, executed an instrument that was declared, on this account, void by the Roman Court. It was in this case that Zacchias asserted that epileptics are wholly irresponsible for some days before their fits, and in gravissimo morbo, or very severe attacks, for three days after. As a complement to this doctrine, subsequently held and acted upon by different medico-legal authorities, Zacchias sets down that, in *levioribus epilepsiis*, or petit mal, the patient, contrary to what happens with the very severe fits, is neither before nor after the attacks of unsound mind. We need not insist on the incorrectness of this latter assertion; nor is the term of three days' duration of the epileptic insanity after the severe attacks, by any means its extreme or invariable limit, as supposed by Zacchias. When describing the true epileptic nature of the unconscious state here considered in relation to acts of violence, + we presented a series of cases of petit mal and vertiginous fits, with which these prolonged, singular mental paroxysms of real insanity are commonly associated. The following is an instance of marriage celebrated during one of such paroxysms of mental epilepsy :---

In August, 1878, a young epileptic, heir to a large fortune, and belonging to a noble family, was induced to marry, during one of his mental attacks, a common young actress from the Bowery Theatre, New York. Neither his mother, then absent, nor his intimate friends became cognizant of the occurrence until he sent his wife away, in the most violent manner, from the hotel where they had been lodging for two weeks after their civil marriage. The actress immediately instituted legal proceedings against him, who denied the acts he had accomplished at the time of the marriage, attributing, very angrily, the action brought against him to a deliberate swindle on the part of the actress's mother, who shrewdly projected and carried the marriage into quick execution, profiting by the mental condition of the spendthrift young man. But the evidence against him left no room to doubt as to the reality of the marriage. Although subject to occasional attacks of grand mal, only in the morning, and to daily fits of petit mal, followed by an unconscious state, during which he executed the most extravagant and lavish acts, epilepsy was not suspected as the cause

- \* P. Zacchias, op. cit., Tomus Posterior, pp. 161 et 162.
- + "American Journal of Insanity," April, 1873, Vol. xxix.

of his strange conduct at the moment of the marriage. The morning he ejected his wife from his apartments he had just recovered from one of his convulsive seizures. Anxious to avoid scandal and disgrace to the family, his mother paid a large sum to the actress to stop all legal proceedings against the young man, who was sent abroad, and his divorce obtained without opposition.

We now pass on to narrate a no less remarkable example bearing some similarity to this, to which we have already alluded.

The case, that of "Sans v. Whalley," came before Mr. Justice Manisty and a common jury, at the Bail Court, Westminster, on the 3rd of May, 1880. It was an action brought by Isabella Sans, a widow (who was until recently a beershop-keeper at North Woolwich), to recover damages from Joseph Lawson Whalley, a widower (Holly Terrace, Leytonstone), for breach of promise of marriage. The damages were laid at  $\pounds 2,000$ .

He then gave her a diamond ring, which was lent to him by his aunt, as an engaged ring. On the following day he came to London, and, accompanied by Mrs. Sans and her brother-in-law, they went to Doctor's Commons for the license, and he paid for it with a five-pound note, obtained by Mrs. Sans pledging two rings of hers and the one Whalley had given her. He asked Mr. Sans to take the license to the church, so that they might be married at eight o'clock on the following morning. He slept at Mr. Sans that night, and on the following day they all three, and Mrs. Sans' daughter, went to the church, which was not open, for the sexton was at breakfast; but, when he came, the Brightmores—relatives of Mr. Whalley—and other people, were crowded outside of the church. Mr. Brightmore seized hold of Mr. Whalley's arm, and said—" Come away, Joseph ; you shall not marry that woman." Mr. Whalley replied—" I am perfectly sober, and know what I am doing; if you come near me again I will have you locked up." In the church, Mr. Beele (the Vicar) by M. G. ECHEVERRIA, M.D.

1880.]

took Mr. Whalley into the vestry, and informed him that he had received a communication from Dr. Vance stating that Mr. Whalley was suffering from delirium. The latter remarked.—" What a shame I cannot marry the woman I like. Had I known it I would have obtained another medical certificate." The Vicar asked Mr. Whalley, in the presence of the Brightmores, what were his intentions, and he replied.—" To make Mrs. Sans my wife, as I have intended for the last seven months," on which the minister said.—" That does not look like insanity, Mr. Brightmore."

Dr. Sharpe, of North Woolwich, who had been brought to examine the defendant, saw him in the vestry of the church. He exhibited symptoms of delirium tremens—hard drinking must have been going on to produce them. He was unfit to contract matrimony, and advised him to delay it for a fortnight, which he was willing to do. But, although so agreed, Mr. Whalley failed to keep his promise at the expiration of the fortnight.

Mr. Mitchell, assistant to Dr. Sharpe, corroborated his testimony.

Dr. Vance testified that he had attended the defendant on several occasions for epilepsy and delirium tremens. Some of the symptoms were very severe; but he did not see the defendant professionally between the 21st August and the 14th September. He found him on the latter day in a high state of delirium. (This was the day after he wrote the communication to the Vicar.)

Mrs. Brightmore, aunt to the defendant, testified that he had fits; as many as six a night, followed by insanity, and also delirium tremens. On the 3rd and 4th September he had fits. She procured Dr. Vance's certificate, and gave it to the clergyman. She brought Dr. Sharpe and Mr. Mitchell to examine the defendant, who left the church with Mrs. Brightmore's sister, and was then in a bad state, and had fits.

Mr. Whalley said : I am the defendant. I am 33 years of age, a widower, with two children. I went to live at North Woolwich about February, 1879, with Mr. Brightmore, a cousin of mine. I have given way to drink a great deal, and at different times I have been attended for disease brought on by drink. I was in a drunken state from March to September, 1879-never thoroughly sober. I used to drive about and visit my friends. When I walked about I used to meet friends, and go off with them drinking. I was in a fearful state of drunkenness in September, and cannot remember any particular day dining at home. I have gone occasionally to plaintiff's house to drink. I do not remember being there on the 11th September. (The written promise to marry produced.) I have no recollection of anything about it, or of going to London with the plaintiff or her son, and going to Doctor's Commons. I have not the slightest recollection of it, or anything that was done there, or at North Woolwich. I don't recollect being in the church to be married. J was told of it several days after; I was quite surprised when I heard of it. I was

laid up for some time after I was told of it with delirium tremens. I believe the signature to the application for the license to be mine, but I have no recollection of signing the document. I do not know what has become of the license. My wife died in July, 1878. I am now under medical treatment.

Other witnesses also deposed as to defendant's drunken habits.

Counsel having addressed the jury, the Judge summed up, and the jury returned a verdict for the plaintiff—damages  $\pounds 25$ .

In this case, delirium tremens seems to have been assigned as the cause of the defendant's conduct; but it is manifest that his condition and demeanour were not those consequent thereon, whereas they quite agree with the paroxysms of epileptic insanity, ordinarily displayed by individuals who can imbibe large quantities of liquor without any remarkable sign of intoxication or of delirium tremens, which may, nevertheless, suddenly explode as forerunner of a convulsive attack, upon some potation beyond the habitual quantity. In delirium tremens there is a group of symptoms that cannot be mistaken. The terrifying hallucinations, the melancholy with homicidal or suicidal tendencies, the stupor, and, above all, the trembling of the facial muscles, with quivering of the hands and limbs, are phenomena too obvious not to have been noticed as proofs of legal unfitness in Mr. Whalley by those to whom he applied for the license at the Doctor's Commons, or by the Vicar of the church, on the morning of the 13th September. Nor was the least allusion made to a single of these striking symptoms by any of the witnesses.

On the other hand, and this is a point strongly bearing on the case, epilepsy in delirium tremens exists, it is true, without any relation to the motory derangement, and may even set in with hardly any tremor; but it never occurs without the delusional mental manifestations evidently wanting in this instance. On the contrary, chronic alcoholism may persist for a long while, with no other conspicuous effect than epilepsy, like that arising from other ætiological sources. But, under such circumstances, the mental, or the vertiginous kind of attacks are the most commonly observed, and the latter are frequently associated with sudden acts of violence, or with an automatic unconscious state, similar to somnambulism, which may last several hours, or even days, and generally terminating, as in Whalley's case, by a violent maniacal or spasmodic paroxysm, the transition to a sound condition of mind taking place, in every instance, after a long, profound sleep. And then, the epileptic exhibits by M. G. Echeverria, M.D.

1880.]

absolute amnesia of what he has done automatically, in an apparently conscious manner, during his mental paroxysm.

The communication sent to the Vicar by Dr. Vance, stating that Mr. Whalley was suffering from delirium tremens, has no legal value, since Dr. Vance, as he testified, had not seen Mr. Whalley professionally between the 24th August and the 14th of September, which was the day after he had already written such declaration.

It should seem that, when Dr. Sharpe was brought to see Mr. Whalley, he exhibited some motory trouble, which the doctor regarded as symptoms of delirium tremens, but which, we rather think, were indicative of the threatening fits Whalley had after leaving the church with Mrs. Brightmore's sister. Moreover, this terminal convulsive stage of the mental attack was, as usually, attended with the high state of delirium noticed by Dr. Vance on the 14th of September.

Finally, the series of acts executed by Mr. Whalley in relation to his marriage is not compatible—we repeat it with any form of delirium tremens, whereas the singular occurrence and complete oblivion, of such acts, bear all the characteristics of epileptic insanity. Facts not disclosed at the trial may yet alter these views; but, based on the above reasons, and the testimony of which we have reproduced the main points, we regard Whalley's case as a typical one of alcoholic epilepsy, his insanity not differing symptomatically from that of other kinds of epilepsy. The only remark we should add, in conclusion, and in reference to the judicial decision, is, that no breach of promise could have been committed by a man who was evidently in an unfit mental condition to contract any legal obligation at the time when he made and signed the promise of marriage.

The laws and religion of France consider the marriage bonds indissoluble, because the civil contract of marriage cannot be executed without the mutual consent of the parties, which involves their sanity and freewill at the time. Legrand du Saulle \* rejects the idea of introducing into the civil codes pathological grounds for judicial separation or dissolution of marriage, and deprecates in strong terms the social evils that would flow out therefrom. For "want of French observations of such a striking interest," Legrand du Saulle cites an example, borrowed from the "American Journal of

\* "Etude Médico-Légale sur les Epileptiques." Paris, 1877; p. 217.

Insanity," to illustrate the dissolution of marriage on account of epilepsy, maniacal furor, and murder. This often-cited observation, at first quoted from the "American Journal" by Falret, in his standard Memoir on the "Mental State of Epileptics," has been copied therefrom by Legrand du Saulle and other French medico-legal writers, but without noticing that the case has been decided by the French Court at Mantes, and not in America, upon the most judicious and convincing argument of M. Amelot, Royal Procurator. This case establishes an important precedent which has thus passed ignored. On this account, we here present its faithful translation :—

"Civil Court at Mantes (Seine et Oise), presided by M. Castel.— Audience of the 28th December, 1844.—Marriage contracted by an epileptic.—Application for its nullity.—Murder of the father-in-law the very day of the wedding."

"This strange trial, perhaps without example in our judicial records, raised the most perplexing medico-legal question of ascertaining the mental disposition of a man subject to epilepsy, during the hours immediately preceding a furious fit, and whether such disposition deprives him of exercising his free-will."

"The following are the circumstances of the case:—François Levieil, aged twenty-eight, a shoemaker at Jusiers, had suffered for several years from epileptic fits. The malady commenced from a fall on the ice. The attacks, at first confined to slight fugitive absences, assumed subsequently a most serious character, degenerating into furious mania. During the years 1838-39-40 and 41, Levieil served in the 5th Light Regiment, in which he pursued his trade of shoemaker as private out of the ranks of the company. He then had frequent epileptic fits, almost always preceded by a short loss of consciousness, during which he would either take the hammer, the knife, or any other tool at hand, to use it as an auger, or would again use this latter instead of a hammer, thus becoming, by such awkwardness, the laughing stock of his comrades.

"When discharged, Levieil returned home in September, 1841, determined to marry and to keep on with his trade. He became soon affianced to the daughter of François Moron, a farmer of Jusiers, and the marriage was fixed for the 26th of the following October. On the 24th Levieil was seized with pains in the head, which seemed to him a forerunner sign of an attack. He called on a physician at Meulan, who had treated him secretly since his return, and asked that he might be bled—an operation from which he had always derived relief; 1880.7

by M. G. ECHEVEBRIA, M.D.

but the physician refused to do it, remarking that he should not abuse this remedy.

"On the morning of the 26th, a few hours before the ceremony, Levieil, suffering from ever-increasing pain, was bled by another physician at Jusiers, but this late operation afforded slight relief to his persistent headache.

"However, the civil as well as religious ceremonies took place. Levieil behaved himself properly; he seemed calm and composed, but deeply taciturn ; he uttered no word beyond the inevitable yes. Did such a calm and concentration and silence indicate in him the state of a man who thinks and reflects profoundly on the importance of the engagement he is about to contract? or, did they not rather evince the dreadful symptoms observed by science in epileptics during the moments preceding their acts of fury? Be this as it may, on leaving the church, Levieil suffered from such a violent headache that, using his own expressions, "it seemed as though a boiler with boiling water were within his head." He accompanied the wedding party to the house of his father-in-law, located opposite his own; but they were obliged to lay him in bed, in a room adjoining that in which the nuptial dinner was spread. Then the fit of furious epilepsy explodes, suddenly developed after much uneasiness, and quickly reaches the extreme of the paroxysm. He throws down the persons with him, and, while they run out to get ropes to bind him, he rushes out of the house in his shirt, takes hold of a shovel, sees a woman, pursues her and knocks her down with a blow on the head. His brother-in-law interposes to stop him; but he and those who accompany him are in turn chased. Levieil then lies on the ground before his house door, grinding the pebbles with his teeth; after a while, stands up and goes in to get a shoemaker's knife; he burst open the door of his father-in-law, Moron, and rushes in, saying, "I must kill you all." The first person that he met was his father-in-law, who, on the instant, falls dead, pierced by several blows with the knife.

"The attack which had these terrible consequences continued for three consecutive days, during which they had to confine this wretched man in a sack. On the 29th Levieil had recovered his senses, and, only remembering the circumstances of his marriage, he had altogether forgotten what had occurred subsequently, and believed that he had constantly slept since that time. He was a few days afterwards transferred to the Maison de Santé at Clermont, where he still remains, and whence he will probably never come out, for his malady is incurable, and, although the fits are rare, they are of such an extreme, sudden violence, that his confinement will be always necessary to public safety."

"Under these circumstances, the guardian of Levieil, who had been interdicted, applied to the Court for a declaration of the nullity of the marriage, on the ground that, at the xxvi. 25

time of its execution, Levieil was already under the influence of his disease, and, therefore, incapable of giving a free consent.

360

"M. Legaux, of Mantes, the advocate, urged strongly the application; he tried to show that Levieil's insanity existed already during the hours preceding the marriage, sustaining his assertion by the opinion of Dr. Bouneau, charged the day after the events, to visit Levieil to inquire into his mental condition.

"Mr. Escaude, counsel for Mme. Levieil, chiefly interested in the success of the application, spoke on the same strain, appealing to the Court's equity.

"M. Amelot, Royal Procurator, calls the attention of the Court to the singular and anomalous position of this married couple separated for ever after a dreadful event, without having ever cohabited, and who, should the marriage be maintained, will remain no less bound to each other by the inflexible law. He recalls the whole circumstances of the affair, laying particular stress on those which seem to indicate that on the very morning of the marriage-day, Levieil was in a bodily and mental condition that rendered him unfit to give a free consent. Levieil, he said, behaved himself decently at the municipal office, and the church; he answered to the sacramental questions, but, was he not at that moment under the thraldom of that terrible malady which was to manifest itself, on coming out of the church, by the furor and homicide? Was not the profound taciturnity, remarked by the witnesses to the marriage, the very sign of a reason already overwhelmed and half paralyzed by that violent headache, which Levieil, in his recollections, compared afterwards to boiling water in a boiler? The little intelligence and will that were then spared sufficed him undoubtedly, to walk freely and, in case of need, to utter some monosyllables; but, did this intelligence, did this will, undermined by a volcano ready to explode, allow him to understand in all its gravity, the importance of the act he was accomplishing?

"On this point the magistrate's conviction could only be formed upon consulting science and the experience of men who have thoroughly studied these kind of maladies, and who assert, that in certain epileptics the acts of fury are ordinarily preceded by a period of calm and taciturnity more or less prolonged, throughout which a progressive process of intellectual derangement, ultimately leading to furious by M. G. ECHEVEBRIA, M.D.

1880.7

dementia, takes place. We do not pretend to demonstrate by rigorous proofs the mental situation of Levieil at the moment of the ceremony of his marriage.

"Proof of insanity, when such insanity is not yet betrayed by words or acts, but by calm and silence foreboding the storm, can only be furnished by God. We rest only on presumptions, but they are grave; they are based on the study and observation of analogous facts by experts, and they suffice, if not to lead us to a certitude—at least, to create a doubt. Therefore, the doubt, on a question intended to decide if the union stamped with such an appalling episode has been freely contracted, ought not to be interpreted in an unfavourable sense to the wishes of the two families who jointly pray for its nullity.

"The Court, agreeing with these conclusions, decided for the nullity of the marriage." \*

Far be it from us any disposition to open the doors to legal precedents that might loose the indissolubility of the matrimonial bonds, but it is as clear an act of justice as any can be, and as incapable of being affected by any fundamental moral principle, that the Court at Mantes could not have arrived at any other decision than to pronounce null and void the marriage of Levieil. To the common judgment of mankind the equity and justice of this decision are self-evident, while the course pursued thirty-six years ago by the French Royal Attorney and Judge, evinces a correct humane appreciation of the singular ways in which the mind may become disordered, and insanity exist without apparent signs, that is worth the attentive consideration of most public prosecutors and justices of our day.

An unpublished case, somewhat analogous to the preceding has been lately communicated by the eminent Dr. Delasiauve to Dr. Hack Tuke, who has brought it to our notice, and kindly allowed us to quote it here :—

In 1869 a bride and bridegroom had just met at the Mayor's office, when the municipal officer became informed, through an anonymous letter, that the future husband was an epileptic. Thereupon, an explanation took place, accompanied by surprise at the disclosure, and reproaches of ill-will. The marriage was, however, accomplished at the Mayor's office and the church. But, in the midst of the wedding ball the husband, being seized with a fit, had to be removed into a room, and on his return to the party, in a quarter of an hour, fell again

\* "Gazette des Tribunaux." N., 5523, Jany. 7, 1847, p. 226.

#### [Oct., Marriage and Hereditariness of Epileptics,

862

with a second fit. Dr. Delasiauve was consulted the day after. In consequence of the impossibility of annulling the marriage by the French laws, no other course was left but to postpone cohabitation, and to prescribe a treatment. The bride's family were acquainted with the Imperial Minister of Justice, and, on Dr. Delasiauve's advice, he was informed of all the circumstances of the case. Unfortunately they were not heeded. The married couple went to live together at the end of three weeks, and they kept on living by themselves, supported by their respective families. The fits increased in frequency, until the unfortunate husband died, three years after his marriage, leaving three children.

The common laws in the American States do not offer great impediments in the way of married persons seeking to be divorced. We know, however, only of one instance, in New York, in which, eight months after marriage, the divorce was obtained on the grounds of ill-treatment, during the furious fits of epilepsy and desertion by the husband.

We remarked in the beginning that venery has, since the earliest times, been considered a remedy for certain kinds of epilepsy, wherefore marriage has been advised with that object. We have discussed this subject at length in our Clinical Researches on Epilepsy, and need not repeat here what we have there stated. Assuredly, "it is manifest," as Sieveking very properly notes, "that the difficulty of meeting with instances which establish the point, sufficiently demonstrates the truth of the general law that marriage is not curative in epilepsy."\* Dr. Collineau has lately advocated the marriage of epileptics, with theoretical arguments which seem very plausible, but are nullified by its lamentable results. Delasiauvet with unsurpassed competency, has condemned this attempt to revive such false doctrine, for, as he observes, "it may be said, from a therapeutical standpoint, that the remedy is worse than the evil, as evinced by experience."

In proof of this, we could cite, among others, the very eloquent and sad instance of a young man, of strong physical constitution, subject to nocturnal epilepsy, and who was prescribed, by a physician, to marry as the best remedy for his attacks. He followed the advice, concealing his malady from his unfortunate bride. But the fits, instead of abating, increased in frequency and intensity, until he suddenly died one night, four months after marriage, in a most violent paroxysm, immediately after coitus. His young wife re-

"On Epilepsy," London, 1858, p. 113.
 "Journal d' Hygiene," Paris, 1879. Vol. iv., pp. 325 and 339.

by M. G. ECHEVERBIA. M.D.

1880.7

mained pregnant, and gave birth to a child, who died, at the age of five months, from hydrocephalus and convulsions.

A patient of the late Dr. Charles Budd, of New York, having married, died upon a series of fits, after the first intercourse. She had also expected to be cured by marriage of her epileptic malady, notwithstanding the contrary opinion This case recalls that reported by Felix of Dr. Budd. Plater," in which a young woman died, on the very first night of her marriage, of violent convulsions, induced, however, it is stated, by anger at the refusal of her brothers to consent to her wishes in regard to property matters. The widower claimed the dower, which was at first denied by the brothers-in-law, who finally paid him one thousand florins.

Intimately connected with the question of marriage, is that of the hereditariness of epilepsy, on which there is quite a difference of opinions among standard authors. Even some of those who recognize the powerful influence of an inherited constitutional tendency on the development of the neuroses and insanity, and Morel among them, do not admit the transmission of epilepsy from parent to offspring, while others reduce it to a very slight or in-significant proportion. Among the former, Lasègue further asserts that, "epilepsy (la grande épilepsie) being not a disease, but an infirmity, is acquired only in two possible ways: by traumatisms effecting permanent lesions, or by spontaneous deformity." + Without entering into the objections to these views, we shall merely point out the cardinal fact, disregarded by Lasegue, of the hereditary transmission through which structural peculiarities and infirmities (not in the broad sense of the term, but as here applied to the imperfect development of the cranial bones) are commonly acquired, and which upsets such restricted ætiology of epilepsy, rendering at the same time more inevitable its hereditary spread.

It will be of no practical importance to discuss the conjectured reasons for the negative results obtained by Tissot, Maisonneuve, Gintrac, Leudet, Morel, Delasiauve, and those who reject the hereditary transmission of epilepsy, sustained by Portal, Boucher and Cazauvieilh, Beau, Moreau, Trousseau, Foville, Voisin, and many others who have accumulated evidence so ponderous as to make the denied fact wholly irrefragable.

\* "Felicis Platerii Observationum, etc.," Basilea, 1641. Lib. i, p. 37.
† "De l'Epilepsie par Malformation du Crâne," p. 12. Rep. from "Annales Méd. Psych," 50 S. Tome xviii., Paris, 1877.

Knowing how subject to uncertainties are the inquiries into the hereditary transmission of diseases, when studied from offspring to parents, we have proceeded in an opposite manner, and, starting from the epileptic parent, we have endeavoured by researches, continued for more than ten years, to ascertain the real state of health of the offspring, excluding from our calculation every case in which we have not been able to verify the facts asserted. We are also aware that the same plan has been pursued by Foville,\* Voisin,† Martin, and others, but on a smaller scale, though arriving at results agreeing with those presently exposed.

A series of 136 married epileptics-62 males and 74 females begot 553 children, of whom :--

				Males.	Females.	Total.
Died in infancy o	89	106	195			
		other diseases	•••	16	11	27
Still-born	·•••	•••	•••	9	13	22
<b>E</b> pileptics	•••	•••	•••	42	36	78
Idiotic	•••	•••	•••	11	7	18
Insane	•••	•••	•••	5	6	11
Paralytics	•••	•••	•••	22	17	89
Hysterical	•••	•••	•••	0	45	45
Choreic		•••	•••	2	4	6
With Strabismus	•••	•••	•••	5	2	7
Healthy	•••	•••	•••	63	42	105
		Total		264	289	553

Taking into account that in one instance both father and mother were epileptics, we may represent in 134 families (136 individuals) the heredity relationship—

> From the paternal side in 61 cases. From the maternal side in 73 cases. From both parents in 1 case.

The 73 females begat 298 children—116 males and 182 females; among the former 47 died of convulsions in infancy, and 28 were epileptics; whereas among the remaining 255 descendants from epileptic fathers there were—of the female sex 24 epileptic, and 42 who died of convulsions in early infancy. This evidently shows that the transmission of epilepsy does not exclusively occur from the mother to the

\* "Annales Médico Psychologiques," Tome ii., 4 s., 1878, p. 120.
† *Ibid*, Tome xii., p. 120.

by M. G. ECHEVERBIA, M.D.

daughter, or from the father to the son, as supposed by some writers; but the epileptic mothers transmitted their malady to a greater number of offspring than the fathers, for the former begot 57 of the epileptic children, 107 who died of convulsions, and only 38 healthy.

Hereditary predisposition existed already among 87 of the parents—40 males and 47 females, in the following relationship :—

				М	ales.	Females.	Total.
Had	epilepti	c father	•••	•••	8	5	8
,,	,,	mother	•••	•••	6	4	10
,,	,,	grand pa	rents	•••	3	2	5
,,	"	brothers		•••	1	3	4
"	"	sisters	•••	•••	5	8	8
"	,,	uncles	•••	•••	4	3	7
"	insane	father	•••	•••	8	6	9
,,	"	mother	•••	•••	6	8	14
"	"	grand paren	ts	•••	4	<b>5</b> ·	9
1)	**	brothers	•••	•••	0	2	2
"	"	sisters	•••	•••	8	2	5
"	,,	uncles	•••	•••	2	4	6
		To	tal	•••	40	47	87

Epilepsy existed in the three generations in 19 of the male and in 27 of the female patients. Insanity in the grand parents re-appeared in the grand children in the families of two males and three females. Some, if not all, the children begot by parents tainted with hereditary predisposition exhibited unmistakable evidences of it. Every case of insanity, except two among the females, issued from this class of tainted parents, who begot 321 children, affected as follows:—

				Males.	Females.	Total.
Epileptic	•••	•••	•••	28	84	62
Insane	•••	•••	•••	5	4	9
Idiotic	•••	•••	· • •	7	5	12
Paralytic	•••	•••	•••	9	12	21
Died of con	vulsions	in infancy	•••	56	73	129
		es in infancy	7	3	16	19
" of hyd	rocephal	us	•••	6	8	14
Still-born	•••	•••	•••	5	7	12
Healthy	•••	•••	•••	20	23	43
		Total	•••	139	182	821

1880.]

Of the above 43 healthy children, representing 13.39 per cent. of the total in this series, 38 have already passed the age of fifteen, the eldest being 27 years. One of the males, aged 17, displays a great musical talent. The 62 children who had epilepsy, with the 129 who died in convulsions, make a total of 191, amounting to 37.69 per cent. of cases in the above table, in which the convulsive neurosis has been directly transmitted from parent to offspring.

The father and mother epileptic begot five children—two died of convulsions in early infancy; one of hydrocephalus, and of the remaining two girls, one seven years old, is an epileptic imbecile, but her sister has a bright intelligence, although of a very feeble physical constitution.

One of the females became epileptic immediately after her first confinement. She displayed the most violent homicidal impulses. Her two first children died in infancy of convulsions, and the third, born at the hospital, was transferred to the Infants' Hospital. Her father, an epileptic and inveterate drunkard, murdered his wife and two children during one of his fits, for which crime he was condemned to life imprisonment in Ohio.

The largest proportion of healthy children—62—issued from the 49 parents who did not exhibit any constitutional neurotic predisposition. They also begot 16 children with epilepsy, and 66 who died very young of convulsions, making 82, or 35.34 per cent. out of their whole 232 descendants. The healthy offspring from these parents amount to 26.81 per cent., and of them 45 have already passed the age of adolescence. In 23 of these 49 parents, epilepsy was developed from one to five years after marriage, and they begot 7 children epileptic, 11 who died in infancy of convulsions, 1 idiotic, 4 paralytic, and 37 healthy. Let us add that, only 7 parents—6 males and 1 female—begot 18 children all healthy, whose ages are now from 13 to 29 years.

To recapitulate, we have found among the 136 married epileptics here considered :---

1st.—68 whose descendants have been epileptic, and either idiotic, or insane, paralytic, hysterical, and healthy.

2nd.—61 whose descendants have been either insane, or idiotic, paralytic, hysterical, choreic, and healthy. In addition, several other children in these first and second groups have died during infancy of convulsions.

groups have died during infancy of convulsions. 3rd.—Finally, as just noted, 7 parents have engendered children who have arrived at the age of adolescence or 1880.7

### by M. G. ECHEVERBIA, M.D.

puberty, without displaying any nervous or mental disorder. No infantile mortality has existed in these families forming an aggregate of 18 descendants-6 males and 12 females,two of the former issued from the only mother epileptic who belongs to this series, in which every descendant appears to be sound.

If we estimate the whole of those affected with the convulsive neurosis out of the 553 children, we find 195 who died from convulsions in infancy, and 78 epileptics, amounting to 275, or 49.72 per cent. of the cases in which an epileptic parent seems to have obviously entailed his disease, without

any change of type, on the offspring. Doutrebente,\* in his Prize Essay—"Genealogical Study on the Hereditary Insane," says—"That the reproduction of similar types in the descendants is a fact only observable with suicidal insanity, but not with epilepsy, or any other kind of malady of the nervous centres. The hereditary morbid germ undergoing transformations, or progressive changes through each successive generation, does not remain stationary." This analysis clearly proves, however, that epilepsy is actually transmitted from parent to offspring without change of type, and, as it results, even in a larger proportion than insanity, which, according to recent estimates, + does not exceed, reckoning direct and collateral To the considerable relations, 34.9 per cent. (Bethlem). number of those who die during infancy of convulsions is due that we do not find, among adult epileptics, the evidences of the remarkable hereditary transmission of their disease. The proportion of those with it, who have survived, amounts in our estimate to 14.10 per cent., which is not far removed from the proportion (12 to 13 per cent.) ordinarily admitted by French and English authors.

We have already stated that these results agree with those obtained by some French alienists. In a series of 32 epileptics collected by Jules Tardieu, t from observations reported by Foville, Voisin, Bourneville, and others, the direct transmission of epilepsy occurred in 23 cases, eight males and 15 females, begetting 72 children, who were thus affected; 33 with convulsions, and of whom 21 died in infancy; one insane, one imbecile, one eccentric, one very nervous, one with strabismus (who herself had three children, of

- \* "Annales Médico Psychologiques," Tome ii., 5 s., 1869, p. 394.
  † J. C. Bucknill and D. Hack Tuke, "Psychological Medicine," 1879, p. 57.
  ‡ "De la Transmission Héréditaire de l'Epilepsie," Thèse. Paris, 1868.

368

whom two died in infancy from convulsions, and the third, very nervous, is subject to sudden fits of anger), 10 died in early infancy, two were still-born, and 11 are apparently healthy. In the remaining nine cases the parents had no children; but their ancestors and brothers, or collaterals, were saturated with a predisposition to epilepsy, or insanity. The epileptic father of one female, observed by Bourneville, committed suicide; the mother, also epileptic, died at the Salpêtrière ; her brother is eccentric, and her sister epileptic. This patient had seven children; the first still-born; three other sons and one daughter died of convulsions in first infancy. Lastly, the father of another female married twice; by the first wife he had eight children, and, all but the patient, died of convulsions. By the second wife he has had nine children, eight have already died from convulsions, and the last, eighteen months old, has thus far shown nothing particular.

The father or mother had epilepsy in 18 cases, and in one of them both parents were affected. Epileptic collaterals were noticed in six cases. Insanity, or other nervous disease, in seven. Unknown, one. Epilepsy was twelve times oftener transmitted from the father to the son, or from the mother to the daughter, than from the parent of one sex to offspring of the other; and in no instance did the transmission appear from the mother to the son, which Tardieu regards as a curious coincidence.

Martin, from statistics that had been collected at the Salpêtrière, in 1874, and from those published by the French alienists we have mentioned, found that 19 epileptics begot 78 children, of whom 55 died in infancy, the majority of convulsions. Of the 23 surviving, 15 only were healthy at the time of the inquiry, and they were all very young.\*

We may briefly add that, 83 families, observed by Lanceraux, in which one or more members suffered from diseases of alcoholic origin, had 410 children; of this number 108 (more than one-fourth) have had convulsions, and, in 1874, 169 were dead and 241 living, but 83 (more than a third of the survivors) were epileptic.<sup>+</sup>

Two of the cases here considered call for a special notice, and we will do it, in conclusion, leaving the reader to draw his own inference on them.

<sup>\* &</sup>quot;Annales Médico Psychologiques," 1878, and "Journ. of Mental Science," July, 1880, p. 313.

<sup>† &</sup>quot;Gazette des Hôpitaux," April, 1879, p. 377.

1880.]

## by M. G. Echeverria, M.D.

The first is that of a young male epileptic whose family was tainted with a neurotic predisposition. We attended him in 1866, and a treatment with the bromide of potassium rapidly arrested his attacks. He then decided to marry a first cousin to whom he was much attached. The father strongly opposed himself to it, on account of the epilepsy and the consanguineous relation. We were consulted on the subject, and condemned the intentions of the young man, who, however, carried them out, leaving the paternal house. He has not only kept free from attacks, but is also the father of four healthy children. Another singular incident with this case is, that, prior to the marriage, and during one of the intermissions of the bromide treatment, the oxide of silver was prescribed against some neuralgic symptoms. And, without our knowing it, or suspending the bromide, he kept on uninterruptedly, for nearly two years after he left New York, with the use of the oxide of silver, his whole body becoming thereby of a dark bluish discolouration.

The other case is that of one of the females, seized with nocturnal spasms at the age of puberty, and who continued so until she married, when the fits ceased without ever recurring thereafter. This woman, however, has had four children, of whom the first died of meningitis and convulsions; the third is paraplegic, and, of the two remaining daughters, one became epileptic at the age of 13, on the establishment of menstruation three years ago. When we cited this example, ten years ago, in our "Clinical Researches on Epilepsy," two of the offspring had only given evidence of the inheritance of a disease which seemed in abeyance in the mother. Let us also remark that no hereditary taint of any kind is known to exist on the father's side.

Finally, we may legitimately conclude, from the facts recorded in this paper, that the direct hereditary transmission of epilepsy is a positive fact; and, that a serious responsibility rests upon any physician who counsels the marriage of epileptics, both as regards the parties themselves and the future of the offspring.