ing toward tabes in spite of degenerations beyond the sensory systems. On the etiological side Kattwinkel lays much stress upon the work of Marie regarding the vascular arrangement in the cord, and also upon the less known work of Guillain and others in determining the course and relations of the lymph channels. From this investigation it appears that the arrangement of the lymph spaces in relation to the meninges and blood vessels is such that a stasis of lymph takes place with greater readiness in some parts of the cord than in others, in the presence of alterations of the blood vessels, or in certain instances even in the absence of visible vascular changes. This combination of dilatation of lymph spaces and consequent lymph stasis and vessel changes, he holds responsible for the alterations observed in the diffuse combined lesions of the cord. The two findings were practically constant in the cases cited. So far as we know, this conception of the function of the lymph system in producing these degenerations has not been maintained by other writers. It needs further verification before being generally accepted.

A case has also been reported by Rheinboldt⁷ from Hitzig's clinic, of so-called "combined system disease," in which the literature is again reviewed in great detail, but imperfectly, and conclusions drawn which add little of significance to our knowledge of the subject. The distinction made that cases with slight anemia are particularly associated with diffuse sclerosis of systematic distribution, as contrasted with the more irregular distribution of the lesions in fatal anemia, does not conform to our experience. We have in the examination of such cords found absolutely no changes which can be regarded as distinguishing the various types of cases.

Frank Billings, in the Shattuck Lecture⁸ before the Massachusetts Medical Society for 1902, presented an important contribution to our knowledge of the cord and oblongata lesions following or associated with pernicious anemia. Billings is inclined to accept the term "diffuse degeneration" as a sufficiently exact pathological statement of the conditions found, and regards it as highly probable that in cases of pernicious anemia the hemolysis and the diffuse cord degenerations are due to the same toxin.

Burr, in conjunction with McCarthy, has reentered the discussion of the "postero-lateral sclerosis" with a report of eight additional cases,⁹ and makes a classification of these lesions into eight groups, which he thinks may for clinical and laboratory purposes be sufficiently differentiated. Such a classification seems to us rather more elaborate than our present knowledge warrants; it is, at least, apparent that the transitional forms of disease of this type are so numerous that sharp categories are to be maintained only with great reservations. An essential

distinction, if it can be demonstrated, is between true combined parenchymatous neurone degenerations and lesions from the outset diffuse in character. Burr and McCarthy are apparently of the opinion that such a distinction may be made, even excluding Friedreich's ataxia and the combined lesions occurring in dementia paralytica. Their group 8 seems to come in this first category, whereas under group 6 are included those cases in which in our experience a much larger proportion of all the combined lesions are found. Oppenheim still maintains the existence of a true combined systemic neurone disease and is inclined to place in a distinct category the type of case described by Russell, Batten and Collier.¹⁰

In general, so far as we have followed the work done since the publication of the former paper alluded to, there seems no sufficient reason for altering the statement then made that no fundamental characteristics of the lesion have been found depending on different causes, and that for the present the term "diffuse" or, to be more specific, "diffuse combined degeneration," is a sufficiently exact designation of the usual anatomical alterations. This naturally excludes the cases, in the post-mortem study of which we have as yet had no experience apart from Friedreich's disease and dementia paralytica, in which true systemic degenerations of lateral and dorsal tracts may take place.

Finally certain evidence appears to be accumulating that cases which present during life a high degree of spasticity with slight ataxia, implying extreme degeneration of the lateral tracts are more chronic in their course than those with early and marked ataxic symptoms. A number of cases recently observed by us clinically and after post-mortem study, as well as the experience of others bears out this supposition.

HISTORICAL NOTES ON THE LAWS GOVERNING CIVIL MALPRACTICE IN THE ANCIENT TIMES AND THE MIDDLE AGES.¹

BY CHARLES GREENE CUMSTON, M.D., BOSTON.

The question of civil malpractice is of interest to both the medical and legal professions, and of recent years many rather unusual cases involving medical liability have been tried in various courts of the United States. That the physician or surgeon have been held liable for their actions by the courts of justice is as old as law, and it occurred to the writer that publishing a few scattered notes he had made on the history of this subject might not be without interest, although he must concede that the question consigned in the following pages is only superficially discussed.

Among the Egyptians the law punished very fully any too imprudent or audacious physician, and in the seventh volume of his "*Histoire de la Legislation*" De Pastoret says that "general

⁷ Rheinboldt: *Arch. f. Psych.*, xxxv.

⁸ Billings: *Bost. Med. and Surg. Journ.*, cxlvii, 225, 1902; also *Trans. Mass. Med. Soc'y.*, 1902.

⁹ Burr and McCarthy: *Journ. Nerv. and Ment. Dis.*, xxx, 14, 1903.

¹⁰ Loc. cit.

¹ Read by invitation at the Annual Meeting of the Massachusetts Medico-Legal Society, June 9, 1903.

rules had been established for the treatment of patients. These were the result of carefully made observations which were guarded by the priests in books that were so respected that they were solemnly carried in the processions taking place on days of public fête. An absolute prohibition did not exist preventing a physician from applying a new truth, but if, far from obtaining the salutary effects that he expected to procure he caused the death of his patient, he was obliged to pay his tribute for the misfortune or the boldness of having sacrificed the life of a citizen, by being beheaded. On the other hand, he was never liable to a patient confided to his care when he followed the rules laid down in the sacred books."

The same authority says that the Greeks also admitted medical liability, and Tourdes quotes an example related by Plutarch of a certain physician of Ephesus, by name Glaucus, who, having left his patient to go to the theater, was condemned by Alexander to be put to the cross, because the patient, having imprudently eaten during his absence, died.

In Roman law the principle of medical liability was admitted, and this is proof positive since it is so formally stated in the old texts. This can easily be understood, since at Rome any one could practice medicine who so wished, and, generally speaking, the slaves practiced the healing art, which was a source of large income for their masters. These physicians, or perhaps it were better said empirical practitioners, had no other end than the gain of money, and there was, consequently, a double motive for making them liable for mistakes committed in the exercise of their practice. On the one hand, there was no guarantee offered by a diploma attesting to serious studies and a certain science, while on the other, there was a complete lack of devotion and scientific disinterestedness.

A physician who gave his services to a patient was responsible to the master if the latter were a slave, and he fell under the jurisdiction of a suit *lege Aquilia*, or under the application of suit for the hire of labor. The first clause of the law Aquilia covered in point of fact by those cases where another's slave had been killed without right. It was quite sufficient that a slave had been mortally wounded. The physician who, after having operated upon a slave, abandoned the after care and allowed him to die was at fault according to the terms of the law which ran as follows: "Præterea si medicus qui servum tuum secuit, dereliquerit curationem, atque ob id mortuus fuerit servus, culpæ reus est."²

There was also error on the part of a physician who by ignorance killed his patient by administering a medicine *mal à propos* and which caused the latter's death, as the following text shows: "Imperitia quoque culpæ admuneratur; veluti si medicus ideo servum tuum occiderit quod cum male secuerit aut perperam ei medicamentum dederit."³

Wounds which were not fatal but which were

sufficiently serious to be damaging to the master of the slave were comprised in the third clause of the law Aquilia. The direct application of the law Aquilia was only allowed when the detriment resulting was caused *corpore corpori*, for example, when it was applied to a physician who had wounded or killed a slave by the performance of an operation upon the latter. But it was not applicable to the one who had only been the cause of the detriment, and who had not caused it by his proper body, as, for example, a physician who had prescribed a medicine *mal à propos*. In this case the *juris consultis* gave the application to the law, that is to say, introduced by interpretation, following the example of that of the law and procuring by the manner in which it was drawn up by the pretor the same results.

According to Accarias the professional services of a physician could become the object of a hire of labor when it was a question of a slave, and Proculus declared that a physician who had badly cared for a slave could be sued either *ex lege Aquilia* or *ex locato*. The following is the exact text: "Proculus ait, si medicus servum imperite secuerit, vel ex locato vel ex lege Aquilia competere actionem."⁴

The direct application of the law Aquilia could not be applied to a physician when the victim was a free man, and Ulpian says that "a man has not the right of ownership of his limbs." Now, in order to obtain a direct application of the law Aquilia, it was necessary that the person injured should have also his patrimony involved. But a free man who had become the victim of errors committed by a physician could have the direct application of the law Aquilia accorded by the pretor who procured the same effects, excepting in that which concerned the pecuniary reparation of the injury. In the latter case the value of human personality was not considered. The reparation could only include the tort resulting from expenses involved for the cure, from incapacity to work and, lastly, the funeral expenses.

Now, although the texts are perfectly affirmative regarding the admission of the principle of medical liability in Rome, it is more difficult to say whether or not it was frequently applied, and it would appear that the contrary was more likely the case if one considered with what violent indignation Pliny affirmed that in Rome a physician enjoyed the most complete impunity as he states in the 29th book of his "Natural History," as follows: "Nulla præterea lex, quæ puniat inseritiam; capitale nullum exemplum vindictæ. Discunt periculis nostris, et experimenta per mortes agunt: medicoque tantum hominem occidisse impunitè summa est. Quin imo transit convicium et intemperantia culpatur: utroque qui perire arguuntur."

The Roman laws were not, however, as severe as Montesquieu has upheld in his immortal work entitled "*Esprit des Lois*," in which he says "that the people were desirous of having physicians punished for their negligence or their ignorance. In this case they condemned a physician who

² Instit. Liv., iv, tit. iii, § vi.

³ Instit. Liv., iv, tit. iii, § vii.

⁴ D. Liv., ix, tit. ii, vii, § viii.

occupied a certain social position to exile, while death was the sentence applied to the one occupying a lower social condition." This great writer committed an error, for the law to which he makes allusion,⁵ "*Ad legem Cornelianam de Sicariis* . . ." did not punish negligence, ignorance or lack of attention, but the *crime*, the grave mistake committed with the criminal intention of producing death.

Medical liability was rigorously followed out in the ancient Germanic law, to such an extent that before undertaking the cure of a patient the physician was obliged to give a security in order to guarantee the indemnity in case he was unsuccessful. A physician who while bleeding a free man wounded him, was obliged to pay his family a compensation of one hundred and fifty ducats in gold. In case of the death of the patient, the physician became the property of the family, who could use its right of vengeance as it saw fit. "Si quis medicus, dum fleotomiam exerceat, ingenium debilitaverit. CL solidos coactus exolvat; si vero servum huiusmodi servum restituat (in lege Ervigiana post exolvat leguntur: si vero mortuus fuerit proprinquis continuo tradendus est ut quod de eo facere voluerint habeant protestatem."

A physician could not bleed a free woman unless her husband or some of her near relations were present, because the law said: "Difficillium non est sub tali occasione ludibrium interdum adrescat."

In Beugnot's edition of the "*Assises de Jérusalem*" will be found many important remarks regarding the liability of physicians in the middle ages.⁶ A physician called to attend a serf, and by his ignorance causing the death of his patient, was condemned to pay the value of the serf and was obliged to leave the city, and I here quote an interesting paragraph:

"C'il avient par aucune mésaventure que je naffre un mien serf ou serve, ou aucune autre personne le naffre, et je i amène un meige et celui meige s'accorde o mei a pris noumé et me dit au tier jor, puisqu'il ot bien veu la plaie, que bien le garet sans faille; et il avient puisque il le tailla malement ou por ce que ne devet être taillé et il le tailla et porce il mourut et porce que it devet tailler la blaie par la levure et l'apostème donc et il le tailla de travers et por ce mourut: la raison juge et commande en ci a juger que celui meige doit amender le serf ou la serve par droit tant comme il valait au jour qu'il fut naffré, ou tant comme l'acheta celui de qu'il estait car c'est droit et raison par l'assise. Et deit la cort celui meige congeer de la vile ou it fist cele mauvaise megerie."

According to this text the physician after having seen the wound promised to cure the patient, but following a badly conducted operation which resulted in the death of the patient, the physician was declared liable for this unfortunate occur-

rence. The text then goes on so as to cover those cases in which a wound became gangrenous because the physician did not give the patient daily attendance, and it declares the former liable for this accident. In the same way it holds the physician liable for any imprudence committed by the patient, because he did not indicate in what ways the patient should care for himself. And, lastly, the text speaks of damages due in case the victim was a serf. The physician, after having promised to cure him, employed bad drugs and did not succeed in his object. The patient was maimed forever. The physician was obliged to take the serf for himself and to pay to his master the sum that the serf had cost him. In case the physician could not pay the entire sum, he was obliged to leave the serf with his master and only pay "celui serf ou cele serve vaura de mains por ce qu'il est mahaigues par sa coulpe."

When the victim was a free man the liability of the physician was very much greater. If it were a question of simple wounds or of bad treatment which did not cause death, not only the physician had no right to demand any fee but he had his right hand cut off. In case of death of the patient the physician was condemned to the gallows: "Mais se il avet se mahaig fait a un crestien ou a une crestienne, la raison juge qu'il det predre le poing destre et ne det plus estre damages for tant que c'il avet rien pris de celui por le meger si est tenu dou rendre par dreit. . . . Et se celui miege avet anei malement mege come est dit dessus aucun franc home ou aucune franche femme et elle en moret la raison juge que celui meige det estre pendus et . . . it a det estre dou seignor par dreit. Mais ce il avait riens receu dou mort si det estre rendu as parens dou mort des choses dou meige car ce est raison et dreit."

The text adds that before being put to death the physician should be taken through the streets of the city in order to serve as an example to his colleagues.

It happened that, on account of fear regarding their liability, physicians refused their services to patients, or if they gave them they demanded a guarantee releasing them from any responsibility should the case terminate unfavorably. Guillaume de Tyr tells us that Amaury I, feeling that his strength was leaving him, demanded medicines from some Syrian physicians. These they refused, and he was only able to obtain them from the Latin physicians after he had given his promise that they need not be disturbed, no matter what issue the disease might take.

In the ancient French law the liability of physicians and surgeons was distinctly held. Denizart established a hierarchy difference between physicians and surgeons, and declared that the latter were subordinate to physicians. He admitted the liability of surgeons and declared them held for tort towards those they might maim by their ignorance, and attributes to physicians the power of examining the facts of the case in order to ascertain whether the surgeon was repre-

⁵ D. iv, iii.

⁶ The ideal type of feudal law is that so graphically depicted in the works which pass under the title of the *Assises de Jérusalem*, and which profess to describe the usages of that curious product of the Crusades, the Latin Kingdoms of Palestine.

hensible or not. He goes on to say that: "When a surgeon has conducted the case according to the rules of his art, he should be paid for his operations and for his care and dressings, although the patient may have not been cured, even if one was obliged at a later date to do an amputation of some fractured limb, the cure of which the surgeon had undertaken."

Efforts were made in France by Charles VI, Henry IV, Charles VII and Louis XIV to formulate laws to control the practice of surgery, but these were apparently only partially successful. It is not without some interest perhaps to add that, as far as I have been able to discover, Henry IV of France was the first to create what would at the present time be called a medico-legal expert. These experts were selected from among the most capable surgeons. It is also positive that about the middle of the sixteenth century certain cities appointed what might be termed expert surgeons, for the purpose of examining the wounds of patients seriously injured, and to see that the attending surgeon treated the case properly; for otherwise the patients could bring suit for tort should it be shown that there had been malpractice. That this is a fact will be found from the following quotation that I make from the treatise on surgery by Felix Wurtz, a noted surgeon of Basel, whose fame was widespread at about 1560:

"Un Chirurgien ne doit point permettre à un chacun de voir, ou mettre la main aux blessures de ses patients, ce que neantmoins plusieurs ont accoustumé de jure. Ce n'est pas que je oeuille blâmer la coutume de plusieurs Villes bien policées, où les Magistrats font ordinairement visiter une fois, ou deux, toutes les blessures considerables, par les Chirurgiens jurez; au contraire, je soustient qu'elle est extrêmement necessaire et qu'elle se devoit establis par tout, enfin que si quelque'un est malpensé, ainsi qu'il arrive assez souvent, il en puisse pacie ses plaintes à la Justice."

The mistakes committed in the rules of practice should be appreciated by men engaged in that profession, and Denizart quotes a judgment which acquitted a surgeon who was accused of having given bad treatment, only after having heard the testimony of expert surgeons. The case was as follows: A surgeon sued a patient, who had a broken arm, for the payment of his fee. The arm had either been set badly or too early and, having been inconsiderately moved by the patient gangrene appeared. The patient refused to pay the bill. The court then ordered some expert surgeons to examine the question as to how the accused had acted and if the operation and his dressings were in conformity to the rule of his art. After having heard the declarations made by both the surgeon and the patient, they returned a verdict in favor of the surgeon, and as a final consequence the court ordered the patient to pay the surgeon's fees. This same writer mentions another case where the surgeon was sued in the criminal court and was condemned to pay fifteen thousand

pounds damage and interest, because the ignorance of the surgeon was proven by the findings of the experts called in on the case.

Charondas, a well-known lawyer who flourished in the middle of the sixteenth century, said that a surgeon was liable for accidents which might occur to his patients if they came from his mistake. He mentions a case of a surgeon who was taking care of a patient afflicted with a venereal ulcer, but an accident occurred during the treatment which caused the death of the patient. For this mishap the surgeon was brought to justice as having been the cause of the death. Charondas during the trial held that since neither deceit nor ignorance on the part of the surgeon could be shown in the treatment employed for the cure of the ulcer, the surgeon could not be held responsible for the accident which occurred later.

Papon, a well-known judge who lived during the regency of Catharine de Medicis, says, that although a patient may die, the physician should not be held liable unless he was found ignorant or too hardy in his treatment, and that consequently a legal examination should be held in order to ascertain the true circumstances of the case, and if the physician is found to have committed a mistake he should be punished by the courts. This same author then relates the case of a physician who gave a potion to a patient which was either capable of killing him or saving him in a very short time, and the patient died from its effects. The physician was, however, easily acquitted, but he was admonished by the court never to repeat the same treatment again under penalty of being severely punished.

Jean Duret, a physician of some note who lived during the last half of the sixteenth century, declared that a physician was liable if he showed himself an idiot in both the theory and practice, or if he showed himself too audacious, and Raymond de l'Eglise upheld that a physician was liable not only for his temerity and his neglect of a patient but also for his ignorance as well. Brillouin, whose classical dictionary was published in 1711, also upheld that physicians were liable for their acts. He based his opinion on Papon and another writer, who declared that a physician was liable either for a slight mistake or a very slight mistake, and he relates several judgments in which the principle of medical liability is upheld.

The public was far better protected against nostrums and quacks a few hundred years ago than it is at the present time, as will be seen from the following: In the reign of Edward VI, Grigg, a poulterer in Surrey, was put in the pillory at Croydon and again in Southwark, for cheating people out of their money by pretending to cure them by charms, or by looking at them, or by casting their water. Many other quacks have at various times been subjected to punishment. Anthony was punished for his *Aurum Potabile*; Arthur Dee for advertising medicines to cure all diseases; Foster for selling a powder for the cure of chlorosis; Tenant, a urine caster, who sold pills at six pounds apiece; Aires, for selling purging

sugar plums; Hunt for putting up bills for the cure of diseases in the streets. The council in the reign of James I dispatched a warrant to the magistrates of the city of London to arrest all reputed empirics, and cause them to be examined by the censors of the Royal College of Physicians. Several were arrested and acknowledged their ignorance. In the reign of King William a certain Fairfax was fined and imprisoned for injuring persons by his Aqua Cœlestis, while in Stow's chronicle it is recorded that a water easter was punished for exercising his quackery. He was set on horseback with his face to the horse's tail, which he held in his hand, with a collar of urinals about his neck, led by the hangman through the city, and was whipped, branded and then banished.

The old French jurisprudence felt some hesitation in pronouncing for or against medical liability, and Merlin believed that suits brought against physicians were rarely successful. He mentions a number of judgments which acquitted the physician. The parliament of Paris in 1696 gave the following judgment in one case, the court saying: "That surgeons are not liable for their remedies as long as they have showed no evidence of ignorance or rashness in their practice." And in summing up the case on which the court had rendered judgment, the Advocate-General Portail said: "There is only one case where suit can be brought against the medical profession, and that is when deceit had been practiced, in which case it is a true crime."

In 1596 the children of a surgeon, who had wounded a patient while bleeding him, were condemned to pay 150 pounds damages by the Parliament of Bordeaux, and in another case a surgeon was condemned, because he cut a child for stone in the bladder without the advice of a physician, to pay damages amounting to 60 pounds, with the injunction of the court never in the future to cut another patient for stone without the consent of some physician who was approved by, and who had been received by, the faculty of medicine.

Many other cases could be cited, but I think from what has been said in this short paper that medical liability has been sustained by all the courts of former times. The question of criminal malpractice I have entirely left aside, hoping at a future date to discuss the history of this important subject.

THE BITZER HOMICIDES.¹

BY GEORGE P. TWITCHELL, M.D.

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LOUIS BITZER, thirty-six years of age, a jeweler by trade, in 1901 lived in Turners Falls. His place of business was on the main street of the village, and he lived on a side street a short distance from his store. His family consisted of his

mother, his wife and three children, Anna, fifteen years of age, Caroline ten, and Louis Martin, five.

Ida Columbe, seventeen years of age, worked in the store for Bitzer as clerk or saleswoman. On the morning of Dec. 31, 1901, Ida went to the post-office to get the ten o'clock mail; when she got back they started to put away the Christmas goods in the back room. Bitzer had two revolvers, one of 32 and the other of 38 caliber, lying on a table in this room. Ida told him to put them away as she was afraid of them.

He opened one to see if it was all right and when he closed it it accidentally went off and shot the girl. When he saw that he had shot the girl he felt that he could not bear to be pointed out by people as one who had done a crime but had rather be dead himself, yet he did not want to die and leave his children, so he went home to take them with him and kill himself. Before leaving the store he wrote a statement of the accident on a large sheet of brown paper. What he subsequently did he does not remember, but he did go to his house and shot his wife, his two daughters, and his son; the boy, who was in bed recovering from an attack of measles, was killed and the others more or less seriously wounded; all recovered. He was disarmed by his wife, sister-in-law and mother and shortly afterward was arrested. He told his mother that he had shot Ida Columbe. At the station house he gave to one of the officers the statement he had written at the store. It was as follows:

Starting in to work, Ida and myself putting goods away which were left over from Christmas, I put away my revolver which I have taken home with me nights to protect myself and Ida late at night. Looking it over and closing it up it went off accidentally and killed the poor little girl. For Heaven's sake don't blame me about it. The moment it went off I thought by myself what will become of my dear wife and children, so I do not want to be looked upon as a man thinking that he committed a crime, so I will die for it, and I cannot die without having my poor children with me. Take us all to church and sing our last farewell, 'Nearer my God to Thee.' Farewell to those who have loved us. Have John Gould take care of our bodies. My business affairs, write to Mr. Wm. S. Dana and J. Aschin, 43 Maiden lane, and the two gentlemen will look after my business affairs. Everything I leave behind will be for my dear old mother and Martin. I for my last words, sitting here and write this pitiful letter, wish you all good luck. This is a sorrowful thing but it must be done, and O My God don't blame me for it. I wish my dear old mother and brothers good-by.

Your beloved Louis Bitzer.

About 12 o'clock I first viewed the body of Ida Columbe. In the back room of Louis Bitzer's store I found her, lying on the floor on her back, the legs fully extended, the feet about three inches apart and resting on the heels, the forearms flexed and the hands resting on the chest. Her head was slightly turned towards the right and rested on a man's ulster, which was arranged as a pillow. She was fully dressed, without her outer garments; the clothing was all in good order, the skirts covering the tops of her shoes and fully extended under her body; her underclothing orderly arranged. Blood was about her mouth and nostrils, smearing the side of her face and neck and upper part of her blouse and

¹Read at the Annual Meeting of the Massachusetts Medico-Legal Society, June 9, 1903.