as a disease of a decidedly inflammatory character." Immediately after which, Dr. Coley remarks, "It is not so easy to explain the process by which the villous structure of the intestines is destroyed and converted into a disorganized mass in those cases in which no traces of vascularity can be detected; but, on the contrary, a state of position. Anæmia is prevalent in the 'morbid parts and their vicinity.' Dr. Coley himself suggests what I believe to be the true explanation of the morbid processes alluded to—viz., that the poison produces 'organic enervation and loss of vitality in the intestinal mucous surface.'"

Dr. Milman Coley further speaks of a "softened and wrinkled state of the cornea" as occurring in a few of the cases of scarlatina which he had witnessed, as also of a softened and ulcerated state of the articular cartilages of some of the joints; advancing these as additional proofs of the destructive inflammation of the scarlatinal poison.

I believe that these disorganizations are not necessarily connected with previous inflammatory processes, as Abercrombie suggested long ago in the case of white softening of the brain, but that they are examples of death overtaking structures from a simple inability to live, or to be kept alive by a pabulum no longer fitted to support the nutrient changes essential to life. Are we not justified in the assumption that life may be brought to a close without a necessary antecedent process of violence?—in a word, that structures and organs, like individuals, *may die without being killed*? The "softened and wrinkled state of the cornea" occurring in these cases I consider strictly to be an instance of this (if I may so call it) *expiring* process. Nearly similar results were brought about artificially in the experiments (if I remember correctly) of Magendie and of Marshall Hall, when dogs were confined to an exclusively saccharine form of diet. Here the cornea was not killed by inflammation, but degenerated and died, by reason of a failure in the nutrition of the part, consequent on the diminished vitality or poisoned condition of the blood itself. We can trace many instances of a partial loss of life in different structures of the body as old age creeps upon us—the "arcus senilis," for instance, around the cornea, the earthy deposit in the bloodvessels, &c., mementoes of the sad-denying conditions of our existence, that "there is a time to die" as well as "a time to live."

As I am not writing a systematic history of scarlatina, I need offer no excuse of myself for my silence hitherto upon one of the most important and interesting of its complications. I allude, of course, to the dropsy, so frequently accompanying it, and which is acquiring, every day, an increased attention at the hands of the profession. Although it is reasonable to conclude, that this must have been a common sequela, at all times, of the disorder, and that its termination, as in our own day, must have been occasionally fatal, it is not a little curious that so good a physician as Cullen should have looked upon it with indifference. "The anasarca swelling," says he, "which frequently follows the scarlatina anginosa, seldom requires any remedy," (vol. ii. p. 234.) A good deal of discordance of opinion exists, at the present day, as to the precise pathology of this form of dropsy; and it is indubitable, that many difficulties surround a satisfactory solution of its origin. In the eyes of many, it owns its rise entirely to the damage inflicted upon the skin as an emunctory, by the specific inflammation to which it had been exposed. Others attribute it to a state of debility alone. But this view of its origin would seem to be opposed by the well-known fact, that it is rare to meet with it as a consequence of the severer forms of scarlatina.† Again, its connexion with an albuminous condition of the urine has drawn especial attention to the kidney as the seat of those changes, giving rise to this serous escape into the areolar tissues, and occasionally into the cavities of the body. Dr. Robert Williams defines the dropsy of scarlatina as a "tertiary action of the poison," but I think without sufficient reason; for the opinion is gaining ground, that the poison of this exanthema, from the first, selects the kidney in common with the skin and fauces, as a channel through which to eli-

minate itself from the body, and that the congestion thus falling upon the renal organs is the immediate exciting cause of the dropsy.* That dropsy is not an *accidental* accompaniment of scarlatina would seem to be borne out by the frequency of its occurrence. And I think it highly probable, that a desquamative process of the epithelial lining of the uriniferous tubes, as recently touched upon by Dr. Snow, at a meeting of the Medico-Chirurgical Society, may ensue upon the specific operation of the poison, and give rise, further, to secondary congestive disease of the kidneys, and this congestion, in its turn, to an increase of the dropsy, or possibly may itself be the first link in the chain of causation in relation to this sequela.‡ But what concerns my present purpose more immediately in connexion with this sequela of the disease is, that I am anxious to raise my feeble voice against the very general opinion prevailing in the profession, as to the sthenic nature of the morbid process in question, with no sufficient proof that it possesses such constitution. The practice which such views has given rise to for its removal is, in my opinion, exceedingly injurious to the interests of those who are struggling through the disease, the convalescence from which is generally retarded more or less by a state of anæmia, even when it has been allowed to run its natural course. The history of almost all the cases recently submitted to the profession, in a series of able papers, published in THE LANCET, by Dr. Miller,§ discloses this feature in the disease to a remarkable extent, and justifies me in putting the practitioner upon his guard not to throw additional difficulties in Nature's path, who has already enough to do to repair the enfeebled machine with the impoverished materials at her disposal. My observations upon scarlatina would be incomplete, were I to pass over in silence the recent views of a German court physician, in connexion with an improved method of treating this eruptive fever, and thereby of offering additional protection against some of its most formidable sequelæ. Those who have not had the advantage of becoming acquainted with Dr. Schneemann's suggestion, will be delighted with the novelty, as well as with the attractiveness, of the remedy, when they learn that it consists in greasing our patient, from head to toe, with a junk of bacon fat, and of renewing the application until he shall find himself in a comfortable envelop of the doctor's "particular variety." But not having yet had an opportunity of putting it in practice, I am unable at present to bear witness to its merits. That Dr. Schneemann should so long have hidden his light under a bushel is, for suffering humanity's sake, to be devoutly regretted. But

"The world knows nothing of its greatest men."

(To be continued.)

UNSUCCESSFUL APPLICATION OF A LIGATURE ON THE FEMORAL ARTERY FOR A WOUND OF THE ANTERIOR TIBIAL, FOL- LOWED BY AMPUTATION.

By W. S. DAVIS, Esq., M.R.C.S. &c., Heytesbury.

A CASE which occurred in my practice during the last summer bears so much on a point of surgery mooted in the lectures of that high authority, Mr. Guthrie, and commented on in your journal lately, by Dr. Massey, of Nottingham, that, though I am but a young *country practitioner*, I am tempted to publish it, begging you to consider it as taken from a kind of general note book for my own private use, and consequently deficient in detail.

* This view of the pathology of the renal affection in scarlatina has been lately urged by Dr. James Miller. I think that there is much to recommend it to our notice. Dr. George Johnson, however, describes (*vide Cyclopædia of Anatomy and Physiology*, article Ren) the morbid state of the kidney ensuing upon this exanthem as one of acute inflammation, which he denominates "acute desquamation nephritis." Dr. West takes the same view of the active nature of the change going on, drawing attention to the "deeply injected tubular part, coupled with which the pelvis and infundibula generally display a greatly increased vascularity." There is a strong argument, certainly, invalidating that view of the question, which would include the renal affection as a feature in the "natural history" of scarlatina, and not as an accidental accompaniment, and that is, that dropsy very rarely follows the disease, save in infants and young persons.

† A microscopical examination of the urine, in these cases, affords evidence of an abundant secretion, or excretion, of epithelial cells. Fibrinous casts of the tubes also occasionally accompany these, which lends certainly some confirmation to the opinion, that the morbid action in the kidney is rather of an active than of a passive nature.

‡ I am no more satisfied of the sthenic nature of the injection, observable in the tubular portion of the kidney, in these cases, than I am of the redness of the skin and throat possessing that property. Dr. Robert Williams does not seem to lend his authority to the concurrence of an "acute desquamative nephritis" with the dropsy of scarlatina; for, he says, "when the patient has fallen from dropsy after scarlet fever, the kidneys have in general been found healthy."—p. 129.

§ The Kidney, in its Relation to Scarlatina. By Dr. James Miller.

* In the course of a discussion at the Medical Society of London, in January last, upon a case of "ordinary scarlet fever" distinguished by collections of matter about the lower part of the body, Professor Murphy suggested that the pus was the result of a deposit of the morbid poison of the disease; similar deposits were observed in erysipelas, puerperal fever, &c. He regarded the cause as extreme debility.—*Vide Medical Gazette*, Feb. 23rd, 1849.

In another paper on scarlatina, read at the Westminster Society, Nov. 4th, 1848, by Mr. I. B. Brown, that gentleman declares the epidemic then raging to be "one of an asthenic form of inflammation," and "that any cases not of this nature are exceptions to the general rule that the disease is one of low type requiring the early administration of stimulants and nutriment."

† This commonly received position is denied by Dr. West.

Aug. 4th, 1848.—William P—, aged twenty-eight, robust and temperate, a farm-labourer, whilst engaged in reaping, allowed his very sharp hook to dangle carelessly between his thumb and finger; whilst hitting at a few stray wheat straws the point was driven deeply into the anterior part of the leg.

I was summoned to him, and being from home did not see him (two miles from my house) till about two hours after the accident. I found him seated at his cottage, with the wounded leg in a chair, before a good fire, and very faint from loss of blood. I learnt that tobacco had been applied to the wound, which was tightly bound with handkerchiefs in the field, by a bystander, which effectually stayed the hæmorrhage. All that I could ascertain in addition was, that "he had lost some pints of blood, which came from him as from a stuck pig."

I presumed that an artery had been wounded, however, from his depressed state. I merely saw him removed to bed, did not interfere with the bandages, and applied a tourniquet loosely over the upper third of femoral artery, giving directions as to tightening, should bleeding return, ordering him to be kept cool, &c. I visited him again some four hours after, found him rallied; no return of hæmorrhage.

Aug. 5th.—No oozing of blood. To be kept very quiet, and carefully watched.

6th & 7th.—No uneasiness about the wound, which was not interfered with. No oozing of blood.

8th.—Complained much of stiffness of bandages, pain, &c. from tightness. Removed bandages, dressed wound, &c.

9th.—Wound looking pretty well; no return of hæmorrhage. Ordered him to be kept low, and in the same position as before.

10th.—I was summoned in great haste at four A.M. Found the patient nearly sunk from loss of blood, which had flowed in a considerable stream. His wife had tightened the tourniquet, and after some flurry had succeeded in stopping it; it had escaped in sufficient quantities to have almost saturated the sheets.

Satisfied that an artery was wounded, and that the tourniquet commanded the flow of blood, I made up my mind to tie the femoral, and rode after a valued friend, an experienced surgeon of twenty years' extensive practice, who kindly came and assisted me in the operation, which was performed at about six A.M., the patient being under the influence of chloroform. The limb was afterwards wrapped in flannel, &c. Saw him twice again on the same day, and found him comfortable. On the two succeeding days he went on well.

13th.—Was summoned hastily to my patient about six P.M., and found considerable arterial bleeding from the accidental wound. In consultation with my friend I applied tannin, Ruspini's styptic, bandage, &c.

14th.—No fresh hæmorrhage. Applications seemed to have effect.

15th.—Was summoned about nine P.M., and, in consultation with my friend, finding he was much reduced from an additional loss of blood, and darkness coming on, I re-plugged the wound, and left it till morning.

16th.—An experienced surgeon of many years' standing met us early in consultation, when we agreed to remove plugs and enlarge wound, endeavouring to find ends of bleeding vessel or vessels; and if we failed, to amputate the leg below the knee, as a last resource. There had been no escape of blood since the previous night, but on removing plugs, &c., hæmorrhage burst forth with increasing violence. I proceeded as we agreed, but found the difficulty consequent on state of parts; we could not command the flow of blood sufficient to justify delay, and I performed the circular amputation as quickly as I could, the patient being under the influence of chloroform. A large quantity of blood was lost. I remained within a few yards of him during day and night, but no hæmorrhage followed this last operation. From this time everything proceeded satisfactorily; there was a slight exfoliation at the edge of the divided tibia, yet the stump healed kindly, and he is now earning a good living as a "pike-keeper."

Remarks.—I have had the opinions of two or three hospital surgeons, of very high standing, that the treatment pursued was proper. I give the words of one:—"I am not prepared to say that it could have been better managed. In nine cases out of ten your first operation of ligaturing the superficial femoral artery would have sufficed to control all hæmorrhage, but the tenth case (such I consider yours) has induced surgeons of authority to lay down the rule, that an artery, when wounded, should be cut down upon, and both ends secured; of course there are exceptions to every general rule, and your case might fairly be considered one."

I have not the presumption to give an opinion on the practice with such high authorities, but I can only say, from the

disappointment the first operation occasioned me, that I should, in a similar case, follow the principle laid down by Mr. Guthrie. It is some consolation to me to know that an hospital surgeon now in practice, and whom three-fourths of the profession would, I believe, place at the very top of the tree, failed to find and secure bleeding vessels in the same situation!

Some may think I might have tied the popliteal, others, that the femoral should have been secured *above the profunda*. The reasons for not choosing the former operation are well explained by Dr. Massey in his paper. In the latter case, I acknowledge, my patient might have escaped with his limb; but I would ask any surgeon—Had I not a right to expect I had secured him by tying the superficial femoral?

With regard to the wounded vessel or vessels, I am induced to believe that more than one was injured, as the principal vessels of the leg are so close to each other, and which rendered my *second* operation far more difficult. Many, perhaps, will say that it could have been easily ascertained in the amputated limb. I would, with all deference, ask those who know the inconvenience of surgical operations, dissections, &c., in a confined country cottage,—where you have not only innumerable disadvantages to put up with, but the prejudices of relatives against your removing the limb from their sight, or making one more incision than perfectly necessary, though a dead member, believing, in their ignorance, curiosity to be your motive, if it is to be wondered at that I did not ascertain it? I *did* make a quick dissection of the limb in an adjoining room, but, from the hurried and rough way in which I was obliged to proceed, I will not advisedly assert that I avoided wounding another branch, besides anterior tibia, during the process!

Should any gentleman favour me with a notice of the case in your valuable journal, I shall be pleased to supply any additional particulars he may require to this imperfect statement.

In Dr. Massey's case the patient is described as suffering for many years from large ill-conditioned ulcers on his extremities. My patient, a large-framed, robust, and healthy fellow, had never suffered from *palpitation* or other ailments. Could the condition of the two have caused so marked a difference in freedom of anastomosis?

Heytesbury, Wilts, June, 1849.

CASES OF POISONING;

WITH REMARKS

By W. T. ILIFF, Jun., Kennington.

CASE 1. *Laudanum; Recovery*.—William P—, aged seventeen, a lad of spare habits, about ten A.M., July 7, 1847, took some laudanum (quantity unknown) with a suicidal intent, owing to some foolish love quarrel. I saw him about half an hour after. He was insensible, though capable of being roused. Face pallid; pupils contracted; pulse 100, feeble, breathing slow. Having given him half a drachm of sulphate of zinc, I returned home for the stomach pump, and speedily introduced it. Vomiting had previously taken place, and the ejecta smelt strongly of opium. I washed out his stomach with water and coffee; after this, some slight degree of sensibility was manifested, but only temporarily. He was now walked up and down the garden; cold water was frequently sprinkled in his face, spirits of ammonia and lavender were given every quarter of an hour, and ammonia was applied to the nostrils. This plan was continued until nearly one P.M., when a favourable change had existed nearly half an hour. The eyes were now suffused; the pupils nearly natural in size; mental faculties confused; some degree of headach. Cold to the head; salts and magnesia now, and in three hours if required.—Six P.M.: Bowels open once; feels better; to be kept quiet, and allowed to doze.

8th.—Has had an indifferent night, but is otherwise better; feels sore in the jaws and throat. He is a shoemaker by trade, and has been drinking rather freely for the last two months, and for some days has been depressed, &c. Ordered compound tincture of gentian, ten minims; aromatic spirits of ammonia, ten minims; camphor mixture, one ounce. Mix: for a dose three times a day.

10th.—Well.

CASE 2. *Laudanum, second time; Recovery*.—June 3rd, 1849, at half-past five A.M., I was called to see Mrs. P—, whose first attempt at suicide is recorded in THE LANCET of March 24th 1849. I found her in a state of profound insensibility, with stertorous breathing, (in number) six; face bloated and dark; pupil firmly and fully contracted; mouth half open; pulse 80, rather