afferent set of filaments remains to be admitted, or an hypothesis both of a direct and retrograde current in the organic filaments must be allowed; a view which would greatly disturb existing theories of the nervous functions.

The operation of this new law is extremely simple when looked at in its entire range. It is to be traced through every system in the economy wherein capillary circulation takes a part. Its primary effects are everywhere alike, and consist only in alterations in the velocity of the capillary current, which is sometimes arrested, sometimes increased through its efficacy. It is the influence of this increase and diminution of circulation, and that in different organs, which gives endless variety to its ulterior effects. In the brain it has been seen to modify the cerebral functions; in the medulla oblongata, the respiratory; in the spinal cord, the motory; altering the equilibrium of the *vis nervosa* and *vis insita*; and affecting every dependency of the nervous centres, voluntary and involuntary, whether the movements of the limbs, or the peristaltic motion of the intestines, or the heart's contractions. And, to trace its morbid effects further, it is seen to influence the secreting processes in every part of the system. These derangements, dependent on a common cause, influence in their turn each other; thus the respiration affects the heart, and the heart in turn the respiratory and other functions; simplicity stamping the commencement, complexity the career of disordered actions. Surely so simple and comprehensive a view of morbid phenomenology cannot be admitted without an acknowledgment of its extensive application to disease, and with this conviction of its value the author submits it to the judgment of the profession.

CASES AND OBSERVATIONS IN HOSPITAL PRACTICE.

By RICHARD CHAMBERS, M.D., Physician to the Essex and Colchester Hospital.

(Continued from page 635.)

AGUE.

This disease is much less prevalent than it was some years ago; but even now it occurs sufficiently often to entitle it to attention. The tertian and quotidian are the most prevailing types; the quartan is met with occasionally, but not oftener than as one to twenty of the other types. The diminished frequency of the disease is in a great measure owing to the very efficient system of draining practised by modern agriculturists, and forms one of the many advantages which has resulted from the application of science to agriculture.

I have found the disease in all its forms perfectly amenable to the sulphate of quinine; nor have I met with any case in which from idiosyncrasy or other cause I have been unable to administer it. I give one dose of *ten grains*, and this never fails to prevent a return of the paroxysm. It is immaterial at what period of the intermission the quinine is taken; but of course on the cessation of the paroxysm is the most desirable time. To test its influence, I have given the quinine just as the rigor had begun; and although that paroxysm has apparently been uninfluenced, the succeeding one has been prevented. In no instance have I found the disease resist this dose of the quinine. In one exceed-

ingly severe case, of eighteen months duration, where the patient was debilitated by the combined influence of disease and poverty, although the single dose arrested the paroxysm, I found it necessary to repeat the dose thrice a day for three days in consequence of the recurrence of slight chills, marking the periods for the usual accession of the paroxysm; this however, as I have said before, was an extreme case, so much so indeed that it was looked upon as incurable. In all cases, I follow up the large dose by a smaller one of one to two grains three times a day, till the system has recovered its tone.

I am aware of the great assistance which the change of air and comforts of an hospital afford, to individuals coming from a malarious district, and "freely" insufficient diet; but the effect of the quinine given in this form is too immediate to doubt for one moment that to it alone is the arrest of the disease to be attributed. The small doses that I have mentioned are not given with any view to their influence upon the ague, but simply as the most efficient tonic in recruiting the exhausted powers of the system.

A point of no small importance is the great apparent consumption of quinine; but having seen the disease treated by half-grain and grain doses thrice a day, I feel convinced that the difference in consumption is very little, the duration of the disease is so much longer under the latter than under the former system of treatment; and as to the advantages to the patient, those only who have laboured under the disease, can form an adequate opinion of them. I do not say that it is so, but really one would almost think, that ague and quinine bore the same relation to each other, that an acid does to an alkali; and that the same amount will be required to neutralize it, whether you give it in one dose or many.

Much difference of opinion prevails as to the propriety of giving quinine in cases complicated with visceral disease: indeed some even doubt its powers of arresting the disease when it is so complicated; but for my own part I entertain no doubt on either point, and make it a rule to treat the ague almost irrespective of the presence of visceral complication, believing that by first arresting the ague, we can more easily treat the latter on the principle "*Sublata causa tollitur effectus*." The prudent practitioner will not, however, altogether overlook the complication, as there may be some cases in which it would be desirable to let the treatment for each proceed "*pari passu*." It may be objected; why give quinine during active congestion of liver or spleen?—but be it remembered that this congestion can be guarded against by depletion, and even supposing that it could not, you are only choosing the least of two evils, as every recurrence of the ague must necessarily aggravate the congestion.

The affections of the liver and spleen that are superinduced by ague, I have found to be best treated by guarded depletion, purgatives, and blisters. Mercury I have found to be inadmissible. Disregarding authority, I was induced to give it a trial in some cases that occurred in the earlier part of my practice, and without any exception, I found it to produce a cachectic state of the system. It may be given for its purgative effect, but even for this other medicines equally efficient can be selected. The preparations of iron are very valuable in promoting convalescence.

In persons of full habit and unreduced strength, in whom general bleeding may be considered necessary, I have found that just prior to the accession of the cold stage, is the most desirable time for its adoption. Practised at that time it diminishes the congestion, which forms the more proximate cause of the rigor; and though it may not altogether arrest the paroxysm, it materially diminishes its violence. In one case I saw the attack for that period prevented.

It may be recollected that the question of bleeding in the cold stage was very much canvassed within a few years; and that, (no unusual thing in medicine,) great discrepancy of opinion prevailed about it. I think the discrepancy admits of being explained away, when we consider its effects. Although the bleeding relieved the congested state of the vessels, its depressing influence upon the brain and heart prevented the necessary amount of reaction, where the individual was at all enfeebled; and, on the contrary, in persons of strong constitution it was productive of good, by moderating what would otherwise have been an excessive reaction. I have no doubt that it is only the difference in the class of cases observed that could have caused such a variety of results in the hands of the talented individuals engaged in the inquiry. Should bleeding in the cold stage be called for, I think a strong stimulant would be likely to counteract any prejudicial effects from it.

Much has been said of the antagonism of ague upon phthisis, but I regret to state that the result of my observations does not enable me to acquiesce in the opinion. The register of our hospital shows a very large proportion of phthisical disease to exist in the town and surrounding country, and this is still further corroborated by the experience of some of the oldest practitioners in the neighbourhood. Although I lay no stress upon a single case, I think it right to mention a case that I heard of last week in the practice of a talented observer. The patient, though in an advanced stage of phthisis, was labouring under well-marked quartan ague.

(To be continued.)

UNIVERSITY COLLEGE HOSPITAL.

CASE OF BONY TUMOUR IN A NERVE.

Reported by WILLIAM H. Y. COLBORNE, Dresser in the Hospital.

Elizabeth Moore, aged 32, a dressmaker, was admitted under Mr. Quain, September 9th, 1845. She is of sanguine temperament, of moderate stature and conformation, and very healthy appearance. She is a native of Somersetshire, and came to London as a servant in October, 1839. During the ensuing winter she first experienced a twitching sensation in the foot whenever the ham was struck: this gradually became more marked during the next two years, and left a slight tingling sensation for a few seconds after the twitching. Two years later, (in the winter of 1841-2,) she first felt a twitching sensation coming on independently of external violence, and recurring every night; this soon increased till it became acute pain, remaining for a longer period, and was confined to the inner and under part of the sole. From August till October, 1842, she resided at her home in Somersetshire, and at this time the pain lasted on an average three quarters of an

hour, still increasing in the length and violence of the paroxysms.

From October till December she was in attendance on a lady of unsound mind at Leamington, and during this period the fits of pain were much aggravated, often lasting for two hours, and compelling her to sit up in bed to rub the foot, and even to rise and walk about, to procure a slight alleviation of her sufferings. She was treated by a medical man as if for a nervous complaint, and under his care the pain entirely ceased for three weeks; it returned however, the paroxysms recurring regularly every night, and an uneasy sensation, which she compares to that produced by a decayed tooth, remaining during the day.

In January, 1843, she was married, and a few months after she observed that the paroxysms occurred regularly about two a.m., still increasing in violence and in the duration of the pain. She was confined in the October following, and during labour, and for three days afterwards, was entirely free from suffering; and it may be stated here, that neither at this, nor at her subsequent pregnancy, had she any milk. After her confinement she entered the London Hospital, under the care of Dr. Frampton, where she was blistered over the sacrum and in the ham, and took steel medicines, without any benefit.

About Christmas she left the Hospital, and applied to a general practitioner, who gave her arsenic and opium, which relieved her entirely from pain for a month, after which time it again returned, but gradually, and its regular periodicity was broken. It now came on in the evening about eight o'clock, and lasted generally about four hours, a second fit occasionally recurring early in the morning; these symptoms gradually increased in intensity till, eight months ago, the paroxysms had merged into one continual nocturnal and diurnal pain. In June last she was confined of her second child, and was again free from pain during labour, and for six hours afterwards, when, the pain returning, her medical attendant exhibited large doses of opium, and kept her narcotised for five days; the pain returned, however, with a marked increase in intensity, and she felt willing to undergo any operation to mitigate her sufferings.

In August she became an out-patient at this Hospital, and was treated constitutionally without relief. On September 9th, she was admitted into the Hospital. On careful examination a tumour was now discovered near the inner hamstring muscles, and two or three inches above the level of the patella; it appeared to be about the size of a small walnut and in the popliteal space; but little manipulation could be allowed on account of the intense pain it caused in the foot, though it produced no local uneasiness.

It may be stated here, that the patient has exhibited no symptoms of hysteria, nor suffered from any other neuralgic pain, but appeared to be a sensible and strong-minded woman.

In the commencement of the disease, as has been said, the pain was confined to the inner part of the sole of the foot, but afterwards extended over the whole of the under part of the foot except the toes, and latterly included the heel; the pain was never accompanied by spasms. She has been aware of the existence of a tumour in the ham for about three years.