the chest were considerably bruised, but no fracture of the ribs existed.

Instead of sending for medical assistance, he, in conjunction with his relatives, on the following day, had recourse to an old woman famous in the district for the curing of bruises. This she effected, or was said to effect, by draughts of the infusion of the root of the *symphytum officinale*, or comfrey, a drug much in repute formerly as a vulnerary, but now, in this part of the country, almost forgotten; the fresh roots of it, however, are, I believe, still very often used in France, in cases of rupture and bruises.

On being called, our sapient dame proceeded towards the invalid's residence, carrying along with her some two ounces of her supposed comfrey-root, newly dug from the ground, which she infused in a quart of boiling water, with a tablespoonful of sweet butter, and caused her patient to drink the half thereof. Shortly after this dose was taken violent retchings and dimness of vision became apparent, and continued for several days, during which he gradually became excessively faint and weak. On being told of this series of symptoms, the old lady doctress said, "It is of no importance, as I have got some oxyrocion to be a batter for it."

About the end of this time, a friend, having called to see the patient, examined the exhumed roots, and said to those present, "This is what we call dead-men's-bells, mistaken for comfrey!" "Nae fairley," said the dying man; "it was nae sooner o'er my throat than I was affected; the stink of it will never leave my nose; there is a lump lying at my heart, and I am poisoned."

He lived from Tuesday afternoon, when the draught was taken, till the following Sabbath evening. On that evening he was removed from his bed for the purpose of getting it more properly made up, but expired in his chair.

Forfar, May, 1849.

ON THE ALLEGED ANTAGONISM OF AGUE AND PHTHISIS.

By RICHARD HODGES, Esq., M.R.C.S., Rochford, Essex.

THE assertion that ague antagonizes phthisis, appears from observation to be incorrect, or, at all events, the antagonism does not exist to the extent that many would have us believe; for, in numberless instances, I have witnessed the development of consumption in those who were suffering from ague, and *vice versa*.

This neighbourhood has the credit of being an aguish one, and therefore I have the opportunity of observation. We have seen, however, ague in all parts of this country, and occasionally extensively and severely, from which one might infer that this locality is not deserving of the name ordinarily given to it. Hundreds of persons live and die here without practically knowing what the disease is, and many even consider that slight attacks of it dispose one to longevity. If it be true that intermittent fever be continually more or less prevalent in this part of Essex, it is no less true than that phthisis abounds here to an extent at least equal to that in any other locality. It may scarcely be necessary to bring forward cases illustrating the truth of the assertion that the two diseases prevail in the same neighbourhood, or that a patient may at one and the same time be the subject of both consumption and ague. Within the last year the three following cases have fallen under my notice:—A young lady, aged seventeen, suffered from intermittent fever, who, in a short time after, died of decline. A married woman, aged twenty-nine, had, about a year and a half ago, an attack of remittent fever, and then, at intervals, ague of the tertian form. In March last I again visited her, on account of a chest affection, which proved to be phthisis, and she died in April. Another young person, thirty-six years of age, who frequently lived in Wallasea Island, (a place favourable to the development of ague and aguish diseases,) suffered from an attack of remittent fever, and subsequently became the subject of a tertian intermittent; latterly, disease of the left lung manifested itself, and she is now dying of true tubercular consumption. Whether the aguish poison delayed the appearance of the pulmonary symptoms, or hastened it, I must leave; it may have debilitated the system, and placed her constitution in circumstances favourable to the production of the disease, and it is not improbable that if there had been no ague, consumption would not have appeared so speedily.

We all know that there are such affections as aguish apoplexy. I am now in attendance upon a person at Leigh in this neighbourhood, who has had a severe disorder of this sort, and intermitting neuralgia, and why should there not be an aguish

bronchitis? I believe that there is such a disease, and it is more than probable that this malady—aguish bronchitis—may have been mistaken for phthisis, and the ague, or its cause, obtained the credit of being an antagonist to what was supposed to be consumption; whereas, in reality, the pulmonary symptoms might have been, or were, the result of the cause of ague, and *bona fide* of like origin with it.

It has not been my wish, Sir, in transmitting this communication to you, to differ from those eminent men who have advocated the doctrine that ague and phthisis are opposed to each other, but to caution those who have been educated to believe in the antagonism not to pronounce a person with ague to be free from phthisis, or assert, that because a person labours under intermittent fever he never will die of consumption.

Rochford, May, 1849.

SOME OBSERVATIONS ON THE EPIDEMIC FEVER OF 1847,

AS IT OCCURRED IN AND ABOUT LISBURN, COUNTY ANTRIM, IRELAND; WITH A SHORT HISTORICAL NOTICE OF SIMILAR EPIDEMICS IN THAT COUNTRY, AND THE LEADING CHARACTERISTICS WHICH THEY SEVERALLY EXHIBITED.

By JOHN JOHNSTON KELSO, M.D., Lisburn.

"Profecto sola observationum frequentia primam mihi suspicionem formavit ne res sic, ut credebatur, se haberet. Suspicio hæc reddidit me proprie opinioni diffidentem; diffidentia ad maturius compulsi examinem."—DE HAEN, RAT. MED., vol. iii. p. 240, 1768.

"Animadvertendum autem est, epidemicorum alios in hoc aut illo anno regulariter et eodem semper modo se habere, iisdem plane phaenominis et conformi symptomatum agmine in plerisque fere omnibus quos adoriuntur, stipatos; atque eadem prorsus via sibi fugam et exitum parantes. Ex his itaque tanquam in suo genere perfectissimis, vera ea certa morborum epidemicorum historia ediscenda est atque tradenda."—SYDENHAM, DE MORBIS EPIDEMICIS.

(Continued from vol. ii. 1848, p. 667.)

As in Egyptian plague, so in Irish typhus, those on whom Fortune has shed more grudgingly of her favours, or has entirely abandoned to the gaunt family of "want, misery, and wo," afford the chiefest pabulum, so to speak, which serves to maintain and perpetuate it in perennial vigour, both in non-epidemic and epidemic periods. So true is the fact of the immensely greater diffusion of fever, in one or other of its forms, among the lower orders in this country, at all times and in all places, that science, on data the most irrefragable, may safely claim it as a law, and in the epidemic, of which we are essaying a local, but necessarily incomplete description, we discover an additional fact in exemplification. For assuming, as we have reason to do, that the population of the town of Lisburn, and the manor of Derrivolgie, in which it is situate, with that of the adjoining one of Kilultagh, (for the exclusive use of which the fever hospital here was originally instituted,) numbers 20,000 persons, and that three-fourths of these are, or were at the time of its invasion, individually so circumstanced as to be placed without resource to the hospital in the contingency of an attack of fever, it will appear, on reference to the foregoing return, that of the remaining fraction of 5000, presumptively, there are recorded 1549 cases of admission within its walls. But the return scarcely embraces the whole period of the epidemic constitution; had it done so, and had all the patients in the locality requiring hospital care been transferred to its wards, the amount of seizures in this class of the community can hardly be considered as having fallen short of 2000, or two out of every three persons composing it.* In the better ranks of life, however, experience, in accordance with prior observation, afforded a very different result; among them the disease, in fact, was comparatively limited; yet, as is equally common, and in some sort compensative, as it would seem, it at the same time almost invariably presented itself with some aggravation of type, not uncommonly with all the distinctive symptoms of malignancy, and a proportionately high relative mortality.

But in order to evidence more fully the extensive diffusion here of fever, in 1847, it is necessary to take into account the degree of its usual—one might almost say normal—prevalence among us. Some idea of this may be formed from a return of this charity with which I have been favoured,† extending as it does over a period of fourteen years—namely, from 1833 to 1846, inclusive, and from which it appears that the average number of patients treated in it during that time computes

* In the fever of 1817, during the two years of its prevalence, it is believed that, in Cork, over one-seventh of the inhabitants passed through the disease.—(Barker and Cheyne, loc cit., vol. ii. p. 26.)

† By Mr. Campbell.

about 217 annually; the fewest number of cases noted, which is 28 and 39, being severally in 1833 and 1834, the largest in 1837 and 1838, which amount to 389 and 366, respectively. As compared, then, with the recent fever, a very striking difference in this respect is here shown; which also in some measure extends to the preceding great epidemic visitation of 1817, on a similar comparison. Thus from an official return of this hospital, contained in the work of Barker and Cheyne,* the number of admissions, from June 7th, 1816, to February, 1817, amounts only to 469, about double the average, for the time of its duration, manifested in non-epidemic years. I shall only here add, that equally striking is the relative mortality in these two successive fevers; thus, as the foregoing table evinces, 137 deaths, or about ten per cent., occurred in the one, while in the other, twenty-four only are reported, which gives a ratio of about the one half.

But in respect of the disease itself, what, it may be inquired, was the prevailing type or character which it assumed? "The type of an epidemic," observes Dr. Ormerod, "being of course that of the majority, is general, not universal,"† a view not dissimilar for that entertained by Sydenham, as evidenced in the passage prefixed to the present paper, but which, as applied to the one under immediate review, seems scarcely to accord with the facts, unless, indeed, on the assumption of its having been made up of all the several types into which continued fever has been divided, occurring in regular succession, each one, from the mildest which first prevailed, up to the gravest which in turn followed, dominating during its reign pretty distinctly all the rest.‡ But this successive prevalence of different typical forms during different periods of the epidemic, which is in the inverse order of what more commonly obtains, was less decidedly marked in than out of hospital here; though otherwise, in Belfast, in the different temporary fever hospitals of which, as I am informed on good authority,§ the rule now indicated rigorously held.

Regarding these several varieties or types, which we now proceed to notice in the inverse order of their intensity or virulence, a few general statements, in the way of illustration, are all, without the risk of unreasonably encroaching on valuable space, which we feel warranted here in preferring. In the adoption of this course, I shall glance at—

1. *Mild Fever, of short duration.*—As in the epidemics of 1740, 1800, and 1817, so in that under notice, a mild form of fever, of from three to nine days' duration, terminating either by diarrhoea, general diaphoresis, increased discharge of urine, epistaxis,|| or without any critical evacuation, and attended, as in these, by great liability to relapse¶ within a limited period, varying from a few days to a week, was matter of common observation, not only in the period of its increase and maturity, but especially so in that of decline. In these cases, which decidedly pertain to the synocha of Cullen,** the general symptoms of reaction rarely ran high, partaking, as they generally did, more of an asthenic tendency than of a sthenic character; and the chief local disturbance of moment was usually in the direction of the head, of which headach, with heat of scalp, followed by wandering of mind or delirium of brief duration, were the more prominent symptoms.

2. *Common continued fever of this climate.*—Of the cases of this kind, corresponding, as they essentially did, with the synchus of Cullen,†† as defined in his "Nosology," a great number

occurred in both periods of its history. Just previous to the outbreak of this fever, dysentery was the prevailing disease, and, as clearly evidencing their intimate relationship during the whole of the transition period, and for some time after, dysenteric symptoms or simple diarrhoea, readily amenable, however, to treatment, most commonly complicated the earlier febrile phenomena, both in this and the preceding variety of it. Howsoever, the stage of excitement in the present form,—which was generally distinguished as one of action without power—passed, a decided tendency to debility in the principal power and functions of life rarely failed to declare itself. The weak, quick pulse, the hurried and somewhat laboured respiration, the lassitude and despondency and bodily debility which then ensued, indicated implication to a considerable extent alike of the vascular, nervous, and muscular systems. The topical symptoms in excess most commonly referred themselves here, as in the foregoing species, to altered balance of the circulation within the head; but in comparison with the synochoid forms of similar preceding epidemics, they appeared generally of very inferior intensity. Though usually terminating between the fifteenth and twentieth day, sometimes with, but more frequently without, any critical evacuation worthy the name, instances in which it was protracted to the end of the third week were occasionally witnessed;*, and it is particularly deserving observation here, that the period of convalescence in many cases, of different degrees of gravity or length of continuance, was not unfrequently interrupted, especially towards the later period of the disease, by grave dysenteric symptoms, which sometimes, in defiance of all remedial means, took fatal hold on the already too exhausted constitution.

3. *Maculated and Petechial Typhus.*—Regarding these as modifications merely of malignant† or pestilential fever, the few observations which it occurs to me here to prefer in reference to either, as they were found to present in the present epidemic, may thus not inappropriately be associated. As may be anticipated, from a previous remark, among private patients a vast proportion of the cases pertained to one or other of these forms; and in respect of them, it may safely be asserted, in so far as limited experience goes, that in no previous epidemic in this country, of which we have accredited and circumstantial account, is there recorded, all things considered, an equal degree of virulence in the symptoms generally, understanding by the term, depression or prostration and derangement, speedy and decided, of the several forces and functions, animal, vital, and organic. During its prevalence, individuals stricken by either form of the disease usually exhibited, by the sixth or seventh day, sometimes almost from the very outset, symptoms indicative of considerable danger; the pulse then evidenced failure, both in volume and force, was weak, small, perhaps tremulous; the prostration or adynamia became decided; the respiration was hurried and somewhat oppressed; the faculties of intellect suffered some impairment or derangement. And in a later stage of the severer cases, the anxiety depicted in the countenance, with contraction or sharpening of the features; the frequent absence of febrile heat of surface, with a tendency to coldness of the extremities; the confusion of mind, or low, incoherent delirium, perhaps, the thread-like, unequal or irregular, and fluttering pulse, numbering 150 or 160 in the minute; the laboured breathing, sometimes with sighing; the occasionally-diminished secretion of urine, often with inability to evacuate the bladder when requisite: all these, with the other cognate phenomena of low typhus, indicated very decidedly that state to which the term putrid or adynamic seems particularly applicable. In the language of Cullen, the symptoms here "showing the tendency to death" were, in truth, those of "great debility."§ Then prostration, distinct and undivided, of all the powers of life, not unaccompanied, in some cases, with "a strong tendency to putrefaction in the fluids,"|| and, which is rather remarkable, not uncommonly with the supervention of but faint evidences of secondary local affection in any quarter, occasionally without a single concomitant symptom scarcely of topical lesion. A fatal termination, happening as it usually did, between the eleventh and fourteenth day from the first

* Vol. ii. p. 130.

† Clinical Observations on the Pathology and Treatment of Continued Fever, &c., p. 2, 1848.

‡ The extreme rarity, too, or rather entire absence here, of all other acute diseases, during the prevalence of this fever, is worthy of note, as affording an additional exemplification of a general fact deducible from the history of this, equally with all other epidemic maladies. In reference to the plague, which is an allied, if not identical disease, the observation of Pagnet here perfectly applies. "La peste," says he, "veut régner seule. C'en est pas à dire que, quand elle est dans sa vigueur, elle empêche tout autre maladie de se développer; mais elle marque du caractère qui lui est propre toutes celles qui paraissent à mesure qu'elles se manifestent, ne revêtant elle-même que les formes qui lui sont imprimées par le tempérament de sujet malade."—(Mem. sur les Fievers de Mauvais Carce. du Lavant et Antilles, p. 135, 1804.) Such is the usual influence of pestilential constitutions of every description on intercurrent diseases, an influence which was first noted 300 years since by Prosper Alpinus, (Med. Ægyptorum, lib. i. cap. 16,) and the accuracy of which has been borne out by all subsequent observation. (Vid. Rap. à l'Académie de Médecine sur la Peste, &c., p. 53.)

§ That of Dr. Pelan, of Belfast, who was one of the physicians of the Barrack-street temporary fever hospital in that town.

|| A very intelligent and honourable practitioner in this town, Mr. Musgrave, who was himself nearly falling a victim to the disease, informs me of his having had some cases which nearly proved fatal from this cause. "Papasillæ sanguinis e naribus stillæ damno sunt." (Hip. Coacæ Prænotiones.)

¶ Febres quæ nequæ diebus criticis, neque post apparentes solutionis horas dimittunt, repetere solent. (Hip. idem.)

** Thus defined in his Nosology:—"Decursus intra septimam, incrementum successivum." (Vide First Lines, par. 67.)

†† His definition is—"Decensus ad duas tresve septimanas, cum pulsus robore sanum, in morbi statu saltem, notabiliter superante." (Vide First Lines, p. 103.)

* Vide Alison, Outlines of Physiology and Pathology, p. 485, 1836.

† "The term malignant, as applied to fevers, may be said to include the rare congestive and the frequent typhoid fever; as applied to epidemics, to denote those in which cases of these two descriptions are the most frequent."—Alison, loc. cit. p. 487.

‡ Subsultus and hiccup, but especially the former, were pretty constant symptoms, which, with affection of the respiration, are, according to the Father of Medicine, of bad omen: Desipientia, cum difficultate spirandi et singultu, mortem adfert.—Coacæ Præn.

§ First Lines, par. 102.

|| Loc. cit., par. 102.

experiencing of rigor,* sometimes so early as the eighth or ninth, was in either case, when not apparently inevitable, always equally seriously to be apprehended; but the balance of danger, on the whole, seemed to incline to those instances of more important complication, almost the sole one which occurred, involving the brain or its envelopes. In the intensity of the leading phenomena in all these cases, a certain gradation, of course, was found to obtain, dependent (speaking generally) less, perhaps, on the dose, so to say, of the originating poison, than on the susceptibility to its influence in ordinary amount or intensity, springing from the previous habits of life, and the state of constitution at the time; the only difference—a very slight one, doubtless—being, not in their essential identity, but in the relative danger of a fatal issue. And holding, as it seems meet to do, by the sentiment,—*melius est petere fontes quam sectari rivulos*,—we dismiss the present meagre and very imperfect general outline of this important typical variety of fever, as is here presented, with the comparative observation that, assuming the picture we have now attempted to draw of it as according in the main with the facts, it will scarcely fail to be perceived how essentially different, if not distinct in character, it here appeared from that which, according to well-grounded statements, seems, *cæteris paribus*, to have obtained in all epidemic fevers, from 1708-30 down to 1817. In each of these, with some exceptions in particular places, or peculiar modifying causes, the distinctive feature, as we have already seen, inclined more or less distinctly to the sthenic or inflammatory, with excessive predominance of certain local symptoms in connexion with important viscera in the head, chest, or abdomen. A further discrepancy particularly apparent is, that while the chief danger in all these fevers pre-eminently connected itself with the topical complication, in whichever organ it occurred, and centred in it, in the present one it commonly diffused itself equally over all the systems and functions of the economy, threatening no single one scarcely ever by preference, but all alike, and with an intensity corresponding to the virulence of the case.

In connexion with this part of the subject, it only remains for us to subjoin a few particulars respecting the condition of some of the systems and functions principally concerned in the disease.

1. *The Tongue*.—In conformity with the results of prior observation in similar epidemic visitations, considerable variety here obtained. More commonly it presented, in a marked degree, the peculiar features characteristic of the disease in its worst aspect; but a slightly furred tongue, with a brown centre, becoming in the end generally brown and dry, was not unusual in instances of pressing gravity. Sometimes, in equally severe cases, it preserved throughout an appearance almost natural,† or it assumed a morbid cleanness, with a tendency to dryness and hardness in the advanced stage.

2. *Alimentary Canal*.—In a vast proportion of cases of every type, and of all shades of gravity, the symptoms connecting themselves with this organ, equally with other abdominal viscera of importance, were comparatively negative. In this fever, in truth, abdominal symptoms of any description proved the exception; but among those that presented, the dysenteric were the most prominent. Occurring principally in the later period of the epidemic, they complicated the synchoid rather than the graver type of the disease; and, generally obstinate, sometimes perfectly uncontrollable, under every variety of treatment, their exhaustive or fatal tendency, when they properly showed themselves, ever proved matter for the most serious apprehension. Phenomena of this kind, it need only be added here, were much more common among hospital than private patients, and in the earlier periods of the epidemic they were quite unknown. As calling for special allusion in this place, irritation, or something more, perhaps, of the stomach, as indicated by epigastric tenderness and fulness, hiccup and vomiting, proved an occasional and most annoying attendant, and the same remark applies to derangement in the biliary system, the symptoms of which sometimes were well marked.

3. *Kidneys and Urine*.—In the advanced stage of many of the typhus and typhoid cases, as a result of the general impairment and perversion of function springing out of the disease, and in which these organs here seemed distinctly to participate, a tendency, more or less, to suppression of urine;‡ was

observed; and still more commonly, perhaps, that peculiar alteration in its quality, known as albuminuria, and which, in the present instance at least, seems clearly attributable to the occurrence, simply, of organic vascular congestion. During the whole of this stage, indeed, when inquired into, the urine was rarely found otherwise than albuminous in some degree; but the failure, to whatever extent it happened, in the due discharge of the function, conjoined, as it very generally was, with some inability to free the bladder at the fitting period, was seldom witnessed before twenty-four or forty-eight hours prior either to death, or an amelioration in the symptoms—an amelioration which was very commonly indicated by a copious elimination of this secretion, concurrently with the diminution or entire disappearance of albuminous matter, and always, from a deposition of the earthy salts, by a certain degree of turbidity on standing. And since a change for the better in this fever was almost invariably evidenced, rather by a very gradual, and at first wholly imperceptible, amelioration of the chief phenomena, than by any rapid and decided improvement, through the intervention of crisis, the first trace of a grey cloud in the urine, following quickly on its emission, was ever all the more anxiously looked for as an indication of invaluable diagnostic significance. Of all the signs, diagnostic or prognostic, which we owe to the genius of Hippocrates,* the one in question, noted and verified as it has been both by Galen, Celsus, and Sydenham, and ultimately accepted by all subsequent observers, is certainly among the most important, whether we regard the ease, extent, or value of its application and indications in a peculiarly interesting class of diseases, and the oversight of which, in the present fever, could scarcely otherwise have eventuated than in much of embarrassment in an anxious moment.†

4. *Skin*.—Allusion has already been made to the sensibly diminished temperature of the surface, with tendency to coldness of the extremities, as of not unusual occurrence in the last stage of the more virulent cases, as well as the proneness evinced to general diaphoresis, or decided perspiration, especially towards the termination of the milder instances, and which, though it sometimes proved critical, was oftener found to be merely symptomatic of present constitutional depression or debility, and therefore rather to be repressed than encouraged. I am now to advert to the attendant eruption,‡ which consisted, for the most part, either of petechiæ or maculæ, rarely of sudamina or vibices, separately or in conjunction. Developing itself, in either of these common forms, generally between the third and fifth day, pretty copiously, first on the extremities, and then on the chest and trunk, it usually remained for about three days, when it began to decline in the order in which it made its appearance, without having displayed anything peculiar. In some cases of either, but especially of the petechial variety, more of irregularity presented, not only in the order and period of development, but in the extent of its diffusion and time of persistence, with other specialities, and they were of those attended by the greatest danger. Altogether, the exanthem, in its normal development and aspect, proved a phenomenon of no significance, or rather, perhaps, a propitious one; in its untimely and irregular appearance, uncertain duration, and modification of character, might readily be discerned, for a sufficiently obvious reason, indications of an unfavourable cast. The only other point worthy specification here is the jaundiced complexion, deep and general, which sometimes occurred, with extensive tumefaction of the parotid and sub-maxillary glands, either running into suppuration, or terminating by resolution, under suitable treatment.§

* Urina in febre album et læne depositum habes sedimentum, celacur liberationem denunciat. (Coacæ Præn.)

† Paulus Ægineta makes three varieties of turbid urine—1, That which deposits a sediment immediately on being voided; 2, That which fails to yield a deposit on standing; 3, That which is clear on being voided, but becomes afterwards turbid. Of these the first is accounted favourable; the third, the reverse; and the second, intermediate. (Works by Sydenham Society, p. 224.)

‡ The ancients, according to De Haen, regarded the petechial eruption in fever as a salutary effort of Nature, and of good import. Yet Tralles asks—An exanthemata in ulla febre sint salutifera? He sums up the discussion of the point in these words: Atque quando Medici quidam melius recte asserunt, multos mori cum febre neminem a febre; ego rectissime affirmaturus sum, multos equidem solvari cum exanthematibus, neminem ab exanthematibus. (De Terreis Remediis, p. 356.) Pringle regarded the exanthem, of whatever kind, as critical—a doctrine ably combated by Hoffman, who asks—Sed quis nunc medicus hæc exanthemata, silente etiam experientia, dicerit critica? Sanæ nullus mentis compos. De Haen himself was too acute an observer not to perceive the correctness of this view of the matter. (Rat. Med., vol. iii. p. 239.)

§ Dr. Pelan mentions to me that blueness of the nose, with swelling, proved of not unfrequent occurrence in the Barrack-street Hospital, Belfast. It rarely showed itself before the eighth or ninth day of the disease, and was invariably followed by a fatal result. An attendant on the worst cases of typhus, and discovering itself only in an advanced stage of the disease,

* A fatal termination on the eleventh day was very common in Belfast.—Dr. Pelan.

† So also in 1817, especially at Limerick. (Dr. Grogan, in Barker and Cheyne, vol. i. p. 427.)

‡ This was a common symptom of the very fatal fever in England, in 1745, of which a brief but lucid statement is given by Huxham. (De Aëre et Morbis Epidemicis, vol. ii. pp. 145-7.)

5. *Circulation.*—Regarding the pulse as in some sort expressive of the state of the heart's action, and thus, inferentially, that of the collective systems and functions of life with which it is in close harmony, the indications, on careful scrutiny, which it discloses in fever must ever be considered as of the highest moment.* In the present epidemic there was manifested here a striking uniformity in essentials; distinctions or modifications in variety, and occasional peculiarities, there undoubtedly were, but with very few exceptions increase of action, with defect of power, terminating more or less speedily in a state of unmixed depression, obtained; or there occurred, almost from the very outset, indications of considerable debility merely, succeeded, in due course, by sheer exhaustion of the central and subordinate moving forces of the circulating system, with its paralyzing influences, direct and reciprocal, in relation to the associated vital and organic systems and actions. These were the main, prominent conditions of this function, which the pulse, by corresponding characters, very clearly evidenced.† To go into particulars on this point my present space will not permit, and I shall content myself by only further observing, in reference to it, that the qualities of force and volume, evinced by the pulse, with due equability, were always accounted, with reason, of much greater importance than mere frequency; but any irregularity in its beat or rhythm, with smallness, and more particularly impaired resistance under the finger, were calculated to excite the worst fears.

6. *Nervous System.*—In connexion with this system the principal feature was exhaustion in some degree, according to the stage and gravity of the case, of the innervation, influencing prejudicially other vital functions, and especially the respiration, which frequently exhibited serious implication. The graver accidents common to most previous epidemics in this country—such, for instance, as coma &c.—were rarely, if ever, here observed; and on the whole, the affections of this system, and of the intellects, discovered in this fever, even in its graver aspect, were ordinarily rather inconsiderable—certainly below what might be expected, and does occur, in sporadic cases of the disease.

Lisburn, 1849.

ON THE EFFECT OF ERGOT OF RYE IN ARRESTING PURULENT DISCHARGES:

SUGGESTIONS ON ITS PREPARATION AND MODE OF ADMINISTRATION.

By J. BROWN, M.D., Boston.

In July, 1847, H. B., aged 17, during a violent fit of coughing broke an abscess in the right lung, and pus mixed with florid blood and coagula was daily coughed up. In consequence of the hæmoptysis the ergot was given, in free and repeated doses, during the space of three weeks.

In August, 1848, she had a sudden return of hæmorrhage, losing a great deal of blood; for three or four days she continuing to lose at least half a pint daily. The ergot was again given until the hæmorrhage entirely ceased. Purulent expectoration then followed, unmixed with blood, dusky and heavy, and amounting to about three ounces daily. The quantity increased from day to day, foetid, and tainting the breath; the cough was harassing at night; salines with opiates and other usual remedies had been given without benefit for a fortnight, when it occurred to me that, in 1847, the ergot was continued in consequence of the expectoration being mixed with blood, and that both disappeared together. She

it must, as it appears from his statement, have been immediately contingent on topical derangement, or embarrassment in the capillary circulation, and a precursory symptom of sphacelus in the parts, the more distinctive evidences of which failed in being developed, from the shortness of the interval between its appearance and the setting-in of death. Be that as it may, the phenomenon came always to be looked on as a fatal omen.

* I confess, though with all diffidence, I could never bring myself to share in the doubts entertained by Celsus respecting the indications of the pulse in fever. The classical reader need only be reminded of the passage expressive of these misgivings, and of the reasons assigned, commencing in these words: *Venis enim maxime credimus, fallacissimæ rei.*—Lib. iii. 6.

† At Lurgan, in the county of Armagh, where the disease displayed itself in an uncommonly malignant and fatal form, Dr. Thompson, the highly talented and gentlemanly physician of our County Infirmary, who was called in consultation to some cases there, informs me that the adynamic symptoms, pure and uncomplicated, were almost, from the very outset, full of pressing danger, death frequently ensuing by the ninth day.

‡ Some instances of extreme slowness of the pulse were here observed: in one, from being 100 and 120 for some days, it rather suddenly, and without obvious cause, or any bad result, came down to 40 in the minute; nor did it regain its healthy standard until convalescence was well established. This was a case of considerable gravity, and the only appreciable alteration in character attendant on such excessive reduction was increase of fulness.

commenced with five grains every three hours, gradually increased. This was continued for a week, when she became impatient of the frequent repetitions; the dose was therefore raised to twelve grains, and given twice a day, combining an opiate at night. The cough was not allayed by the opiate, and there was sickness and loss of appetite through the day: the opiate therefore was omitted, and the ergot given for one night uncombined. On the following morning, I found that the night had been favourably passed, she having coughed less, and slept more, than usual. But after a few days, the expectoration being still very copious, the ergot was repeated four times a day. Very soon the expectoration began to diminish and improve in quality; but the complaint of the frequent repetitions being revived, it was again given night and morning, the dose being increased to a scruple, and this was continued without any change or combination for several weeks, until the cough and expectoration entirely ceased. The ergot in this dose was continued through the whole of September, October, and November; the general health improving along with it. The young lady, in April, left Boston for London, where she now resides.

Every supply of ergot to the patient should be fresh powdered, for that kept powdered in bulk, in the ordinary way, I have seen alive with the ergot mite.

When the dose is in excess, there is sickness and much pain in the abdomen, and also in the chest, if pulmonary disease be present, but not otherwise—should it be determined to persevere with the ergot, it is necessary to cease when such symptoms appear, recommencing after a pause with small and frequent doses, until tolerance is re-established.

Boston, May, 1849.

Reviews.

Illustrations of the Effects of Disease and Injury of the Bones.
By EDWARD STANLEY, F.R.S. Folio. Twenty-four Plates.
Longman & Co.

IN our review of Mr. Stanley's Practical Treatise on the Diseases of Bone, we only cursorily alluded to the present volume of Illustrations, in consequence of the great length to which our observations were extended. Feeling, however, that we should be wanting in our duty were we to rest content with a mere reference to the volume, it is our purpose now to take a more especial notice of it.

The plates are twenty-four in number, highly coloured, and graphic, each of them illustrating some form of disease described in the Practical Treatise, and its peculiar varieties. The three last are illustrations of the repair of fractures in the human being, and in the lower animals—a subject which did not come within the compass of the above-mentioned work. To all the plates there are appended descriptive remarks by the author, and to many of them is added a short history of the individual cases; so that, in fact, the volume may be looked upon as a work of itself, and may profitably be studied either with or without the Practical Treatise.

Of course amongst such a variety of drawings some of them will be found more striking, and depicting the various morbid structures with more faithfulness, than others; and to these we shall particularly call the attention of our readers.

In Plate 3 are two figures, which are striking from their clearness and accuracy: one is descriptive of the commencement of necrosis; the other shows the changes consequent on the formation of a small abscess within a portion of the tibia.

Plate 6 will arrest the attention of the reader more from its exhibiting a remarkable specimen of circumscribed abscess of bone than from any artistic beauty. The following is the history of this extraordinary case.

"Charles Anderson, aged thirty-one, in the summer of 1814, when on a voyage to the Baltic, fell on deck with his leg under him; this was followed by great swelling below the knee, and inability to use the limb. The swelling subsided, and the power of using the limb so far returned, that he was able to walk upon crutches, when he had a second fall, which completely disabled him, and was followed by a return of the swelling. In the winter 1815-16, he became a patient in the Edinburgh Infirmary, when amputation was proposed, but to this he would not consent. In the spring 1817, the