

have been thoroughly opened, if any constitutional irritation, or rather if a quick pulse and hottish skin should remain without any marks of inflammation, small occasional opiates will generally prove highly beneficial, though laxatives should be daily prescribed so long as the fever shall continue. In most secondary fevers, the nervous system is peculiarly susceptible, from the body not having attained its full tone of vigour before the attack: this state of the nervous system frequently makes those medicines called anodyne highly expedient, either during or after the employment of purgatives or laxatives; and certainly opium or hyosciamus is sometimes remarkably advantageous, particularly when an unusual irritation has been excited on the mucous membrane of the bowels.

During convalescence from typhus, the diet ought to be most carefully regulated. At first it should consist of very light broths, gruel, or arrow-root, and the convalescent should not be allowed any solid animal food till he is able to walk about; and even then it should be given in very small quantities at first, and gradually increased, for a full meal of it might at once excite the system into fever. Many cases of secondary fever have fallen in my way which arose from vain attempts to raise the prostrate powers suddenly into strength by too nutritious food, and several also which originated from indulgences in small portions of indigestible articles, such as sausage, cheese, pastry, or raw vegetables. Even ripe fruits should not be indiscriminately or abundantly allowed during convalescence, as some of them are apt to induce fever, especially if the rinds or seeds be swallowed, or the fibrous parts of certain fruits, which may keep up an irritation for many days, by passing undigested into the bowels. The pulp of roasted apples is one of the most suitable things, the pulp of fresh grapes, or the juice of a ripe orange. In convalescence, the appetite is often keen and capricious at the same time, but the medical attendant should restrain both these conditions within due bounds, and give precise directions respecting the quantity and the quality of the food; while he ought likewise to preserve a proper balance between the ingesta and the egesta, by the occasional exhibition of laxatives,

which are nearly always required at some periods of convalescence. When fever has been produced by too full a diet, the vascular system is generally in a state of plethora, so that general or local bleeding is mostly requisite in the first instance; but as the functions of the stomach, liver, and intestines are synchronously disordered, purgatives should be persevered in until the fever abate, and the secretions become natural. At first, the stools will commonly be composed of dark, thick, liquid matter, mixed with hard lumps of feces, and they ought to be daily inspected until all scybala be dislodged. In the beginning of such attacks calomel and rhubarb are commonly the best purgatives, followed up by the castor oil; but after two or three doses of the former, an action on the bowels may be maintained by the latter alone, which operates with little irritation, and which, by not changing the colour of the evacuations, shows us when the secretions are really natural. Where any irritating matter has been taken into the stomach, it is best to expel it by a gentle emetic, and to allay the turbulence afterwards by a small opiate; but if this matter should have passed from the stomach into the intestines, one or two purges will be requisite, with an anodyne afterwards. The use of diffusible stimulants, however sanctioned by common routine, are most decidedly prejudicial during convalescence in a large majority of examples, producing with rapidity all the bad effects of errors in diet; and that practitioner indeed will have most reason to be satisfied who not only in general rejects wine, but likewise tonic medicines, and who, instead of employing such means, places his patients in a fresh atmosphere, and occasionally exhibits laxatives.

Genuine typhus nearly always leaves considerably more relaxation of the whole habit than those fevers which arise not from a specific contagion, but from some ordinary cause; and it is partly on this account that if convalescents sit up too long at a time, or if they take too early or too long exercise, whether of body or mind, they may readily lapse into secondary fever. It is best, therefore, to permit them only to sit up for a short time at once, and to prohibit them from using any inordinate exertion until the strength be completely



re-established; and for some time after they begin to sit up, even their dress should be strictly attended to, and varied according to the season of the year, that they may neither be irritated by too warm, nor chilled by too light clothing. It is also important, that the temperature of the convalescent's apartment should be properly regulated while he shall remain weak; for if it be allowed to fluctuate with that of the external atmosphere, or if air be admitted in partial currents, an attack of chilliness may succeed, and either at once threaten life, or be followed by febrile excitement. When the animal heat is largely and suddenly abstracted from the surface of an enfeebled and emaciated convalescent, the whole skin becomes deadly pale, the respiration exceedingly oppressed, and the pulse a merely small, undulating, fluttering line; so sunk is the heart's action for want of the stimulus of a due degree of heat in the body, and from the blood, in retiring from the superficial into the deeper seated veins, having accumulated too super-abundantly about the right ventricle and adjacent vessels. Some cases of this kind prove fatal in a few hours, where the means of restoring the animal heat to its ordinary standard and universal diffusion, have been neglected or misunderstood; but if, as soon as the chill comes on, external warmth be perseveringly applied, if warm water, with wine, or even a little brandy, and six or eight drops of laudanum, be internally administered, all risk from chilliness will commonly be soon averted. In short the natural temperature will be restored, and the tide of the circulation again returning to the surface, the heart will at once be freed from over-distension, and roused into an energy sufficient to move the blood in its accustomed round. The animal heat is one of the principal media of connection between the nervous and vascular systems, and where it is excessive, the heart's action will be usually increased, and where it is deficient, that action will be usually diminished or oppressed. Such seizures as the above are unquestionably of the congestive order, but the exhausted subjects in whom they occur, and the extreme reduction of the animal heat render cordials necessary, as means of exciting internal warmth. It has been

figuratively but forcibly said, that general rules in physic may murder their exceptions; and certainly the circumstances coupled with this peculiar congestion demand a treatment different, in some important particulars, from that adapted to congestions occurring in the fulness of health and strength, with a notable alteration in the animal heat. Indeed I readily confess, that my knowledge of congestive diseases is altogether extremely imperfect; but having been instrumental in directing the professional attention to their pathology, I cannot but hope that the deficiencies will be supplied, and many new lights concentrated on the subject. When the chilliness is overcome in the alarming attacks alluded to above, a copious perspiration frequently succeeds, and thus convalescence may be again shortly re-established; but if no perspiration should succeed, and if a simple or an inflammatory fever should supervene, it must be treated accordingly, due allowance being made for the debilitated state of the patient. In some convalescents from typhus, who possess more constitutional vigour, the chill from exposure to cold is comparatively slight, in others scarcely regarded by themselves, though in both it generally soon terminates, by the efforts of nature, in the stage of excitement; and then, as in the former case, the fever will be either simple or inflammatory, but more manageable, on account of the greater vigour of the patients, who bear evacuations better.

There is yet one point respecting secondary fever which I could wish were most particularly remembered, as it may enable others to save patients under circumstances, in which I have had the misfortune to lose some. Several instances of secondary fever have occurred to me, which were designated merely by an increase of heat, a quickened pulse, and a slightly furred tongue, without pain or uneasiness in any part; in short at their commencement they were divested of every thing like genuine inflammation, and I therefore trusted to evacuations by the bowels, and the antiphlogistic regimen. In some cases, this plan entirely removed the fever, but in others it failed, and as the excitement continued, I observed that in one, two, or three days, signs of positive inflammation began to appear in some important part; the inflamma-



tion being generally seated in that quarter which had seemingly suffered most during the progress of the primary attack of fever. Inflammations of this kind sometimes baffled all my exertions, for they came on so insidiously, from the general excitement acting on local and latent weaknesses, that now and then they at length suddenly overwhelmed the functions of a vital viscus, and as I had not anticipated, could not then parry the deadly attack. Occurrences of this kind, therefore, have put me actively on the watch, so that when a simple fever takes place secondarily, I now most frequently employ leeches in conjunction with purgatives, as soon as ever the skin grows hot and the pulse at all sharp or quick; and since I have pursued this method, internal inflammation has rarely arisen afterwards, provided a spare diet was strictly adopted at the same time, with absolute rest, and the tepid ablutions. Here the remarkable effect of the leeches has been to diminish the heart's action without reducing the general strength; and, even if accused of tedious repetition, I must again assert, that these little agents are powerful auxiliaries in the treatment of fever.

It would be a sad delusion always to think, that the chances of danger are completely past with the original disease, for that would lead to a neglect of those precautions by which secondary and serious attacks may most frequently be prevented; and I would earnestly advise every medical man, when he has subdued one affection, invariably to give those minute directions to his convalescent patients which will be most likely to prevent the accession of another. Few things are more useful than marking those circumstances which reproduce disease, when a confidence in returning health throws both the ordinary convalescent and the ordinary attendant off their guard; for, by collecting information of this kind, a species of anticipation is at last produced in the practitioner which very often enables him, like a prophetic influence, to avert an evil, which would otherwise fall upon patients from the neglect of necessary restrictions. It is remarkable, however, that relapses are more common in some epidemics than in others, and even sometimes more common at one period

of the same epidemic than another, either from greater predispositions left by the more intense impressions of the disease, or from some concomitant and peculiar state of the surrounding atmosphere. When called early to primary seizures of fever, in most of their modifications we have fixed principles to guide us, provided the patients have been tolerably healthy before the attack; but when called to secondary seizures, in which the body has been wasted from the preceding illness, our principles become less certain in their character and application, inasmuch as if we stop too short or go too far, we are often alike in danger of a speedy failure. In a word, we can depend less upon the resources of nature and of art. As a general rule, however, in secondary attacks of fever, it is better not to err on the side of excess with respect to evacuations; and when sufficient evacuations have been made, anodynes are peculiarly suitable to tranquilize that agitated state which we term irritation. Having now considered the most important circumstances with which my experience has furnished me respecting typhus, some other affections shall be adduced, in order further to illustrate the pathological and practical bearings of the doctrine of a simple, an inflammatory, and a congestive form of fever.