she rushed at the window, and endeavoured to precipitate herself out of it. She broke the window-sash; and it was as much as they could do to hold her. She became very noisy; raved; screamed "murder"; became very excited and very violent. She was always much worse at night. For one week prior to her admission, she never slept at all—"never closed her eyes". For six days she refused all food, declaring that "they wanted to poison her". During the daytime she was quieter and more morose.

She was admitted on the sixtieth day, and remained under observation till the 150th day. In this period, she improved in the state of both mind and body. The prominent features of her case exhibited in the asylum were, briefly, depression, illusions respecting smells, irritability of temper, and occasional outbreaks of violent conduct or language; but nothing that would remove the case from the category of melancholia. The patient's well-doing was much interfered with by her very ignorant husband. Nothing would make this man believe she was not quite well, because she talked coherently, and her memory was unaffected. At his visits, he repeatedly raised the question with her of unjust detention, etc., in madhouses. She was so much irritated, that it became necessary, for the poor woman's sake, to make choice between absolutely forbidding his visits to her, or risking her condition by a premature discharge. She was so far improved, that the latter alternative was adopted; and she was allowed to leave the asylum for one month, on trial, on the 150th day of treatment. At the expiration of the month, she refused to return. She was sent for, and resisted at first, but soon yielded; and on the following day she expressed regret at having refused. After her return, a marked alteration was observable in her state. She now had an illusion connected with the sense of hearing. She said that she heard voices under her bed. She continued to have occasional outbreaks of violence. Several times she used very threatening language to myself, demanding her liberty, and working herself into violent paroxysms of rage, which terminated usually by fits of crying. There was now nothing which could be called depression of spirits about her, as formerly. There existed no morbid fear or dread. On the 196th day, the husband again interfered, and removed his wife out of the asylum, by giving an undertaking, as provided by the Lunacy Act, that she should no longer be chargeable to the parish, and that she should be prevented from doing injury to herself or others. He was strongly advised by me against this course. The magistrates exercised their privilege, and discharged the patient, which they are fully empowered to do. This occurred in July. On June 22nd of the following year, she was, notwithstanding the undertaking, readmitted; and the following information was given by the husband.

On leaving the asylum, they went to live in the same house as her sister. She was very well, according to his estimate, for the first month; after that, she began to say that there were people on the top of the house, and that she would shoot them—she heard them talking. She endeavoured to get out on to the roof. She attended to her housekeeping, but was a little forgetful; would place things in wrong places; would put wearing apparel, knives, forks, saucepans, etc., together. She frequently went into her sister's apartments, and accused her of various things, and often abused her. She became pregnant in September. At first she ate and drank well, and improved in health. She wanted extravagant dishes, and wasted her money foolishly. She for some time wanted to assault the street-criers. She said that they were "crying things about her". One night, she rose and endeavoured to batter down the partition-wall, saying that there were people concealed there. She gradually became worse and worse. She took offence at the pictures hanging on the wall. She became violent towards her husband, and threatened his life. She took a poker to him on one occasion, and on another attacked him with a knife. For about the last three or four months her dangerous attacks increased, and were directed against every one. She accused her child—a little girl of seven years—of going with debauched characters. "She knocked the children about" frequently. They (the husband and wife) were turned out of lodging after lodging, on account of her violence. Her mother was at last afraid to come near her; and the husband was in constant fear of his life. She accused her family of wishing to poison her; took her food to the chemist to be analysed; and frequently refused to eat. She continually complained of bad smells, as of sulphur or gas; and frequently would not go to bed, unless the windows were left open. On several occasions, she wanted to go elsewhere to sleep. Lately she became erotic, and had illusions or delusions that she was ravished in her sleep, and accused her husband of conniving at it. In May, or in the tenth month after her removal from the asylum, she was delivered of a child, and became still more excited and violent. She threw the infant on the floor. She attacked the nurse, and at length was removed to the workhouse, and was very shortly brought back to the asylum.

Her condition on admission was that of a very dangerous and violent lunatic. She was very abusive, using also obscene language. She frequently struck; scolded, stormed, raved, and had become very incoherent in her language. She slept little. Her bodily health has improved since her return to the asylum.

This case is selected as an illustration of the transition of melancholy into mania. The symptoms followed each other in the order which I have pointed out in previous papers; viz.: 1. Symptoms connected with the feelings, and especially a stage of depression of spirits, apprehensions, fears, etc.; 2. Anomalies of the perception, or illusions; as foul smells, tastes, then hearing of voices; 3. Alteration of the intellect, as delusions, or false belief in the existence of persons concealed; the case terminating in confusion of ideas and incoherence. The motility was, for the most part, actively excited throughout; even in the state of depression, she was disposed to be violent.

The last point worthy of note is the passing of the case into what would be called by most physicians in England chronic mania, from a state which no one would have hesitated to call melancholy in its first stage.

[*To be continued.*]

ON DIPHTHERIA.

By J. West Walker, M.B.Lond., Spilsby, Lincolnshire.

[*Continued from page 553.*]

Treatment. I now approach the last and most important test, by which the truth or otherwise of the proposed theory of the nature of diphtheria is to be tried. Having endeavoured to show how the various questions arising on the subjects of diagnosis, prognosis, etiology, and contagion, admit of more satisfactory solution, all that remains to me is, to inquire whether, by adopting such a theory, treatment can be placed on more rational bases. Since unity of disease naturally tends to uniformity of treatment, while diversity suggests diversity of remedies, at the first blush, we appear somewhat as losers by the change proposed. If, however, in any particular epi-

demic, diversity of disease be once established, it is vain any longer to hope, satisfactorily, to carry out treatment by uniformity of remedy. Treatment of complex epidemics of miasmatic diseases, especially when extensive and malignant, if to be conducted with credit to ourselves, demands a close acquaintance with all that pertains to the principles and practice of treatment applicable to diseases generally. All that experience, judgment, and vigilance, can effect will be required at our hands. Symptoms must be watched for and detected by every available means, and their significance fully recognised; while every weapon which can, in any, even the slightest, manner, be made to influence our dread enemy, must be brought into action. In this warfare, let us ever be mindful of our true position; let us remember, we are but allies—it may be powerful and necessary allies—and that the heat and brunt of the fight has to be borne by the reparative powers of the constitution. Still, by coming vigorously to the rescue—by knowing when to strike and when to forbear—by breaking down impediments *à fronte* and by imparting *vis à tergo*—we may often so assist Dame Nature, that many a conflict, otherwise doubtful, shall be decided in her favour. Above all things, time must be gained; for, in such case, it may often be said with truth, "time is life." The type of the epidemic must be closely studied; and when, as in the recent prevalence of diphtheritic diseases, that shall prove to be asthenic, special heed must be taken, and any indications in that direction promptly assailed. Local complications are to be attended to; disordered secretions to be rectified. Sustenance, most concentrated in form and nutritious in kind, is to be regularly administered by the mouth, and, if necessary, by the rectum; while stimulants, alcoholic and ammoniacal, are to be unsparingly supplied on demand. Animal heat must be husbanded as far as possible by attending to the temperature of the apartment and to the clothing of the patient. No sanitary defect can be safely left unrectified; especially must concentration of poison, either by crowding together affected patients or by neglecting proper ventilation, be guarded against.

It is needless further to extend these remarks; for, in a word, these terrible visitations require of us all that is implied in the term "skilful treatment"—that difficult accomplishment which can only be the resultant of a mind well stored with knowledge, received by the twofold avenues of study and observation; a judgment educated to draw correct inferences; and a will ready to carry out decisions.

Having thus far indulged in generals, I will now descend to particulars; and endeavour to show how, by adopting the views advocated, "treatment, having more reliable indications, becomes less empirical, more rational, more successful"; and, in order to accomplish this, it will be well to tabulate the various diphtheritic diseases, and then, following the usual plan, to consider cursorily the treatment applicable: 1, to the external complication; 2, to the general symptoms. Under the second heading, rather than go into a description of the numerous states of system, and descanting on the remedies for each, I propose to consider *seriatim* the various therapeutical agents which have been brought forward as beneficial in diphtheria, viewed as a distinct disease, and to endeavour to point out the applicability of each to particular conditions.

Diphtheritic diseases may be arranged, according to locality, as follows.

Skin.

Conjunctiva.

Mucous Membrane of the Female Genital Organs.

Cavity of the Mouth. Thrush; stomatitis; noma; canker; etc.

Nose. Chiefly catarrhal, or extending from below.

Throat. Strumous or other enlargements of the tonsils; chronic pharyngitis—relaxed throat; the phthisical throat, or analogous conditions in other chronic exhausting diseases; syphilis; epidemic sore-throat, benign or malignant; quinsy*; influenza: scarlet fever; measles(?); small-pox; fever—typhus, typhoid, relapsing, remittent, intermittent, puerperal, etc.; erysipelas.

Air-passages. Epidemic croup; measles; extending from above.†

The term influenza requires a word of explanation. It expresses, in my opinion, rather than one acute specific disease, a class containing many, and perhaps widely different, general diseases, which, owing to close analogies and to absence of positive symptoms, are incapable of isolation, or of reference to their proper place in our nosology. These diseases, always remarkably epidemic, and manifesting that disturbance of the general system to which we apply the term "low fever," are, like other febrile disorders, capable of existing in a mild or in a malignant form. The name simply expresses an influence; and that, during the recent epidemic of diphtheritic diseases, an influence or influences have been at work, other than those which produce the well known specific diseases, may perhaps be conceded. If there be a somewhat new disease during such epidemics, it must, I take it, for the present, remain hidden in this class. If there be cases which admit not of arrangement, *quoad* their general symptoms, as instances of common epidemic sore-throat, of one of the specific fevers, or of some other recognisable disorder, such cases, until furnished with diagnostic signs sufficient to enable us to remove them, must be received into that common category of miasmatic diseases, which embraces the analogous effects of unknown influences. Under this heading, I would, for the present, include "febricula", and all the many "doubtful and anomalous" cases of fevers. Severity, being a relative property, has no bearing on the question of kind. Let me repeat it, I dare not altogether deny the existence of such a general disease as diphtheria; all I contend for is that, in the present state of our knowledge, we have no means of distinguishing it: and, more especially, that it bears no special relation to the formation, other than contemporaneous existence.

The word *catarrhal*, applied to diphtheritic affections of the nose, is used in its etymological sense, as expressing simply a condition, without the slightest reference to the cause or causes upon which that condition depends.

Local Treatment. From what has been advanced, it follows, that the treatment necessary for the local symptom ought to be such as will have a tendency to bring about healthy action in the part undergoing disease, and thus render it no longer amenable to the influence of the external agent. In furtherance of this object, local remedies are of unquestionable service. Their value, however, will differ greatly, according as the case shall be one of local disease, *pur et simple*, or of general disease with local complication; for while, in the former case, they may be looked upon as curative, and all that is required in the shape of treatment, in the latter, they can be esteemed only as

* "More rarely the tonsils suppurate." (Dr. H. Greenhow, *On Diphtheria*, page 8.)

† "It should be borne in mind also, that cynanche tonsillaris does sometimes, by extension of the inflammation to the neighbouring parts, superinduce that very formidable species of cynanche—cynanche laryngea." (Dr. Watson's *Lectures*, vol. i, page 808.)

adjuvants, capable of restraining and moderating the local complication.

All strong remedies—especially if frequently applied—are greatly to be deprecated, as liable to produce those very pathological conditions which it should be our constant endeavour to prevent; and in this opinion, I believe, I am supported by modern experience generally, though the *rationale* has not, so far as I am aware, been previously given.

Diphtheritic affections of the *skin*, do not seem to require any special treatment. They are not in themselves dangerous; and all we have to do is to insure cleanliness, rest, mechanical and physiological, and to employ mild stimulating applications.

Conjunctivitis, when diphtheritic, is to be treated in like manner, as when not so complicated; the principal local means consisting of applications of solutions of nitrate of silver, the use of suitable collyria, and protection from light.

In affections of the *female genital organs*, it is important to ascertain whether the foundation disease be simple or syphilitic in character; for while, in the former case, simple remedies suffice, in the latter, such special remedies as dusting with calomel, black wash, etc., must be resorted to.

When the disease presents itself on the parts within the *cavity of the mouth*, the solid nitrate of silver, not too frequently applied, becomes the most convenient and efficacious of topical remedies; as assistants, we have borax, myrrh, honey, cream, etc.

In the *nose*, not having the same facilities for inspection, while principles remain the same, other modes of practice must be had recourse to. The syringe comes to our aid in the application of liquids, while powdered alum, calomel snuff, etc., may be received by insufflation.

To enumerate half the remedies which have been applied in diphtheritic affections of the *throat* would be a tedious and profitless task. Founded on Trousseau's view, that "by interposing energetically to combat the first manifestations of diphtherite, we may sometimes arrest the progress, and prevent ulterior manifestations," every possible medicament, no matter how potent its action, deemed capable of attaining the end, has found advocates for its employment. It is a view about which I am happy to say, with Dr. Jenner, "that the doctrine taught in the text, founded on my own experience, is quite opposed to it." All that I find it necessary to resort to in practice, are applications from time to time of moderately strong solutions of nitrate of silver or of sulphate of copper. Of the two, the copper is, perhaps, the preferable remedy; for not only is it more cleanly, but also its emetic action, especially at the commencement of the case, is often of signal service. When the patches are distinct and isolated, a large camel-hair pencil becomes the most convenient instrument of application. The membrane around, and especially below, requires the effect of the remedy; for the diseased action has a particular tendency to spread downwards; and it is in that direction that danger is most to be dreaded. When the morbid product is more extensive, especially when of the soft variety with much infiltration—and this, according to my experience, particularly occurs in erysipelatous cases—the swab will unquestionably be found to answer better.

Next to the astringents, I believe the most useful topical remedy to be glycerine. It seems to afford protection to the inflamed surface, to allay irritation, and to expedite recovery. If, however, we keep clearly in view the indication, to carry out which local remedies are applied, the actual mode and frequency of application, and agent to be chosen, may be safely left to the judgment of the practitioner.

Gargles answer two indications: 1, assisting the local remedies in their stimulating tonic effects; 2, washing away and deodorising detached particles. For the first purpose, we employ astringents such as the mineral acids, tincture of perchloride of iron, alum, etc.; for the second, chlorinated preparations and permanganate solutions.

Ice, cold water, solutions of nitrate of potash, etc., have a cooling antiphlogistic effect upon the parched and inflamed surfaces, and especially when grateful to the patient, are to be recommended. On the other hand, inhalation of steam, either of water or of vinegar and water, will, in some cases, especially of epidemic sore throat, with tendency to suppuration (quinsy), be found to afford greater relief.

Counterirritation, though not generally of much service, is to be employed on the same principle as if the epidemic had no diphtheritic complication. Blisters, owing to liability to cutaneous diphtherite, had better be avoided; but a mustard poultice applied early has often appeared to me to act beneficially. When it is desirable to keep the external skin in a state of more or less congestion, stimulating embrocations may be resorted to; and for this end, too, warmth, after the manner of poultices, becomes an useful adjuvant—linseed meal, bread, bags of heated oats, bran, or potatoes, according to choice.

In *laryngeal* cases, our direct means of local treatment becomes more difficult of application, and less efficacious. Blisters here, too, had best be avoided; and, perhaps, the most useful external application is the hot moist sponge, as recommended by Dr. Graves, over the neck and upper part of the chest; for not only does it act beneficially as a direct fomentation to the affected parts, but, also, by imparting warmth and moisture to the inspired air. Of tracheotomy, having no experience, I forbear to speak.

Disinfecting Vapours. It may be as well here to mention certain agents employed chiefly as disinfectants; for, although primarily intended to destroy noxious emanations, they admit, in one sense, of being considered as local remedies. An atmosphere more or less charged with chlorine, iodine, or ammonia, impinging on the diseased mucous membrane, acts as topically as the fluid applications of Beaufoy or Condy, and assists in furthering a like end.

Iodine has recently been brought forward with great commendation by Dr. Richardson, who believes that by it, "in one of the worst cases of smallpox he ever saw, he was enabled to deodorise the air of the patient's apartment with a facility and comfort never before experienced, and that the process contributed largely to the recovery of the case"; and also, "that iodine thus used affords a good practical index as to the purity of the air in the apartment. If, on volatilisation, the odour of the metalloid be long in being developed, the evidence is clear that the air is proportionately charged with organic matters."

[*To be continued.*]

THE THIRD APHORISM OF HIPPOCRATES. Among gymnasts, development of body carried to its utmost extent, is dangerous, for it cannot continue; and since it cannot continue, nor be increased, it must fall off; therefore it is expedient to resolve it, not by slow degrees, in order that the body may acquire a new commencement of growth; neither should the reduction be carried to its farthest point, for this also is dangerous, but it should be brought to that degree which is suitable to the nature of each gymnast. (*Rev. Dr. Haughton.*)