

REVIEWS.

ART. XIII.—*Traité Pratique de la pneumonie aux différens ages et dans ses rapports avec les autres maladies aiguës et chroniques.* Par A. GRISOLLE, D. M. P. Médecin du Bureau Central des Hôpitaux et Hospices civils de Paris, &c. &c. &c.

A Practical Treatise on Pneumonia, as it occurs at different ages, and considered in its connections with other acute and chronic diseases. By A. GRISOLLE, D. M. P. &c. Paris, 1841, 8vo. 747 pages.

THIS treatise, devoted to the consideration of one of the most frequent and fatal diseases to which we are subject, is the result, we are told, of six years persevering labour. It contains a summary of 373 cases, observed and recorded by Dr. Grisolle in the Paris hospitals. By far the greater number were cases of primary pneumonia; 69 however were met with in individuals already labouring under some acute or chronic affection. Dr. G. has made use also from time to time of materials derived from other sources, and examined the principal works of ancient and modern writers on the same subject, not confining himself to the office of a mere historian, but endeavouring to appreciate their value, and to point out the fallacy of certain doctrines. Without further preface let us proceed to a more detailed consideration of the disease, and first of the

Pathological Anatomy. The anatomical characters of an inflamed lung are first described under the three heads of engorgement, red hepatization and purulent infiltration. According to Stokes, the stage of engorgement is preceded by one of injection and dryness; but as this view, however theoretically probable, is not satisfactorily established by direct observation, our author adopts the ordinary division, and considers the state of engorgement as the first stage of the disease. In the second stage the lung becomes impermeable to air, resisting and heavy. In one case observed by our author the increase of density was such that the weight was ten times as great as that usually assigned to a healthy lung. Such instances, of course, are rare, and for their production require that nearly the whole lung should be hepatized. The state usually styled splenization, is also considered by our author as dependent upon inflammation, and belonging to this stage. In support of this conclusion he mentions having met with six cases presenting the symptoms of acute pneumonia along with the characteristic physical signs of the second stage, where the only lesion found to account for the phenomena was splenization of the lung. This condition is also sometimes found in connection with ordinary hepatization. After describing with great clearness the anatomical characters of the three degrees of ordinary acute pneumonia, their extent, &c. he goes on to speak of the lobular or disseminated form, so frequently though not exclusively met with in early childhood, in which the anatomical lesions, instead of occupying continuously a certain portion of the lung, are found scattered throughout it, isolated lobules being the seat of the affection. Why this form should especially occur in infancy is not satisfactorily determined. In connection with this form of the disease is noticed ano-

ther described by Andral under the name of vesicular pneumonia, characterized by a number of red granulations disseminated throughout the pulmonary tissue, an appearance which our author has not met with.

He observes further that the researches of MM. Rilliet and Barthez seem to show that this lesion described by Andral is nothing more than vesicular bronchitis, in which a portion only of the pulmonary vesicles being inflamed and becoming distended by a puriform liquid, the lung appears studded with a number of gray or yellow granulations, resembling tubercles, but distinguishable from them by the circumstance that when cut into, they give exit to a puriform liquid and then collapse. This lesion is evidently the same with that noticed by Dr. West of London, in a late interesting report upon the pneumonia of children,* under the title of vesicular pneumonia or bronchitis. Like the gentleman just mentioned he considers the lesion to have its seat in the extreme pulmonary vesicles, a fact which he says may be readily ascertained by tracing a minute bronchus to its termination in one of these little sacs. Dr. West further observes that it is a frequent complication of lobar and lobular pneumonia; but seldom constitutes the chief lesion. He mentions but one instance in which it was not surrounded by some other form of pneumonia.

The much greater frequency of inflammation in the right than in the left lung, seems now well established by a mass of facts. This preference for the right side exists throughout all periods of life. Various explanations of this circumstance have been offered; some supposing that it was to be accounted for on the ground that persons more commonly lie upon the right side, others attributing it to the more forcible use of the right arm. It has also been accounted for by supposing a greater functional activity of the right lung, owing to its receiving a larger amount of blood than the left; but our author observes that the volume of the right lung is also greater, and probably its capacity. He thinks it more natural to attribute the greater frequency of pneumonia on the right side to the difference in volume and capacity between the two lungs, since the greater the size, the more extensive must be the surface exposed to the action of morbid causes. To our minds this is hardly a sufficient reason, unless we admit at the same time a greater functional activity, in the production of which several of the circumstances above mentioned may concur.

In reference to double pneumonia, our author's observations are in accordance with the experience of those who believe it to be a rare occurrence. He found it in the proportion of one to sixteen of the whole number of cases. Of course it is understood that this applies to the lobar pneumonia of adults; that of infants as well as lobular and metastatic pneumonia generally, being very commonly double.

That the lower lobes are more frequently the seat of inflammation than the upper is fully confirmed by our author's observation, in whose cases the proportion was as 4 to 3. Various circumstances however modify this law, particularly the extremes of life and certain epidemic constitutions. Thus in infancy and old age the upper lobe would seem to be equally or even more frequently affected than the lower, and in certain epidemics there is an evident tendency to attack the upper lobes. The greater comparative frequency of inflammation of the upper lobe at the extremes of life than during the intermediate period, is a strong if not a conclusive

* The British and Foreign Medical Review, April 1843.

objection to the opinion that the preponderance of inflammation of the lower lobe in adults is to be attributed to the influence of gravity in favouring congestion of blood, since this force should on the contrary exert its greatest power at those periods of life when the vital force was least capable of counteracting it.

As regards the precise anatomical element of the disease, Dr. G. is of the mind that nothing positive can be asserted. It has always appeared to him that both the vesicles and the intermediate tissue were equally involved when the inflammation was established, and that the distinction of vesicular and intervesicular pneumonia was not borne out by facts. He inclines to the opinion indeed, that the vesicles are the especial or at least primitive seat of the inflammation which then extends to the cellular tissue, and that the independent affection of the latter has not been satisfactorily made out.

If from the primary idiopathic pneumonia of adults, we turn our attention to the secondary form of the disease, we find that several of the laws above mentioned no longer hold good. Thus the preponderance is no longer in favour of the right side, and the simultaneous affection of both lungs, instead of being a rare, is here a frequent occurrence.

Most competent observers are agreed in regarding true pulmonary abscess as a consequence of pneumonia, to be very rare. But a single instance has been met with by our author, whose description of this lesion is based upon twenty-two cases of it, derived from various sources. Having completed the description and pointed out the danger of mistaking collections of pus between the pulmonary lobes, in tubercular cavities, &c. for true pneumonic abscess, he goes on to speak of consecutive and metastatic abscesses, and lastly of gangrene, a lesion which he has never met with amongst those who have fallen victims to acute idiopathic pneumonia.

Having finished the description of the various anatomical characters presented by the inflamed pulmonary tissue, he then passes to the consideration of the concomitant lesions of the pleura, bronchial tubes, heart, stomach, &c. Dilatation of the bronchial tubes was not met with, and he is inclined to think, that in infancy where this lesion appears to be a frequent one in connection with pneumonia, it is less the result of the latter disease than of the bronchitis which so often complicates pulmonary inflammation in children.

Dr. West states in the paper before quoted that he has frequently met with dilatation of the bronchi in children affected with pneumonia, and that it was especially marked in those cases where the inflammation had supervened upon whooping cough. The dilatation, he says, bore no proportion to the amount of fluid contained in the tubes, and hence he thinks that some other theory than that of mechanical distension must be resorted to in order to explain it.

In common with most recent writers of authority, our author regards chronic pneumonia as a very rare affection, having met with but three examples of it. That this lesion should ever have been regarded as frequent is clearly owing to its having been confounded with other alterations, particularly the tuberculous.

The account of the anatomical characters is concluded by a notice of the peculiarities presented in cases of secondary pneumonia. Where inflammation of the lung comes on in the course of another disease, the changes

which the organ undergoes are much the same as when the affection is primary. It much more commonly, however, assumes the lobular form, which among adults is indeed almost always secondary, and amongst infants very commonly so, as where it follows whooping cough, bronchitis, &c. Splenization too, is a lesion more frequently met with in the course of other diseases than as a primary alteration. By Louis, this lesion is not considered as dependent upon inflammation, a view in which our author does not coincide. Dr. G. indeed thinks, as before observed, that like hepatization, it marks the second stage of inflammation of the lung, being met with generally in individuals previously debilitated, where the liquids are more under the influence of gravity, and consequently engorge and macerate the tissues, and thus modify the common characters of inflammation. The facts adduced seem fairly to justify the inference.

Causes.—The etiology of pneumonia forms the subject of the second chapter, where the facts going to show the influence of various circumstances and conditions in its production, are carefully detailed and considered. In estimating the influence of age he has been careful to take not merely the absolute number of deaths at different ages, but has compared them with the corresponding population. Although the disease occurs at all periods, of life even in the foetal state, it is particularly common in children up to six years of age, after which it diminishes very much until puberty, when it again increases in frequency. After thirty years of age it again diminishes until sixty, from which period it becomes very common and is, says our author, the most frequent as well as the most fatal of all the acute diseases of advanced life.

That women are more subject to pneumonia than men, seems well established and is generally admitted. Dr. G. agrees with those who attribute this, not to any special predisposition in the male constitution, but to the difference in the occupation and mode of life of the two sexes, and cites several instances where, when similarly exposed, women were found equally liable to the disease with men.

The opinion that a first attack predisposes to a second, is confirmed in the pages before us, and it would seem also that the inflammation is most likely to occur on the side first affected.

We will not, however, follow our author seriatim in his examination of the probable influence of a variety of circumstances, such as the different professions, climate, season, &c. He has collected together with great care many of the facts already known, bearing upon these questions, to which he has added the result of his own observations. Exposure to cold, atmospheric vicissitudes and sudden check of perspiration, are usually regarded as the great causes of pneumonia. Some, indeed, have gone so far as to assert that cold is the exclusive or almost the sole cause of the disease. Our author strongly opposes this view, and whilst he admits the reality of the influence of cold in certain cases, he thinks that its effects have been very much exaggerated. He could find no sufficient evidence of the operation of cold in inducing the attack in more than about one-fourth of the cases observed by himself, a statement nearly in accordance with the experience of several other writers. He cautions his readers against admitting with some physicians, that, in those cases where the patient cannot recall any particular exposure to cold previous to the attack, this cause may still be regarded as having been operative, since the patients may have neglected to notice impressions which they nevertheless

experienced. Such a mode of reasoning he thinks altogether illogical, and especially inadmissible where the etiology of disease is concerned, since it is here not allowable for us to regard any cause as really operative, save in those cases where its action can be separately traced in that particular instance. But is this really so? are we obliged before we can affirm, for instance, that smallpox is uniformly or very generally contracted by exposure to the emanations from the bodies of those affected with it, to point out the time and circumstances of the exposure in each individual instance? Must we limit the operation of contagion to those cases where the patient can recall the precise time, place, and circumstances under which he was exposed to it? Are we not quite as sure that it is equally operative in thousands of cases where the patients are perfectly unconscious of how the exposure took place? Most certainly we are; and yet we are told that in the case of pneumonia it is unscientific to admit the operation of cold as a cause, except in those cases where the patient can recall precisely as above mentioned, the mode in which he was exposed to it. But it will be said we can readily imagine an individual to be exposed to the effluvia of a contagious disease without his being conscious of it. And may we not imagine the same thing as regards exposure to cold, a check of perspiration, or the like? Certainly we may, and not only so, but we must admit such a result to be of necessary occurrence, so long as the mass of mankind have not leisure to note every change of temperature, every draft of air to which they may be exposed, the impressions produced by them upon the body, its varying susceptibility to their influence from the state of the cutaneous surface, &c. Upon the whole then, we think, that a conclusion the reverse of our author's is the true one, and that it is absolutely unreasonable to limit the operation of a given cause to those cases in each of which its operation can be separately and independently shown. Admitting this, then, let us see what are the positive arguments in favour of giving to the influence of cold in the production of pneumonia a greater extension than Dr. G. seems disposed to assign to it, and to do this we need not travel beyond the line of facts which he has himself so accurately laid before us. In the first place, it is admitted that in almost every case where the action of an exciting cause can be made out, this cause is found to be cold. But in three-fourths of the cases no exciting cause could be discovered, by which, however, the reader must not infer that many of those patients did not themselves think that they were indebted for the attack to a check of perspiration, but only that they could not give such an account of the time, place, and circumstances, as would render the point clear. There is strong presumption then at the very start in favour of the idea that many of these latter cases were brought on by cold, since this cause is not only shown to be capable of producing the effect, but is almost the only one to which an attack can ever be directly traced.

Let us now see how far an examination of the conditions which are treated of under the head of predisposing causes will confirm this view. In the first place it is unquestionable that pneumonia prevails to a greater extent in northern and temperate climates, especially when they are subject to sudden changes of temperature, than in the equatorial regions. This general influence of a severe climate and atmospheric vicissitudes is admitted by our author, but at the same time he is disposed to lay great stress upon certain apparent exceptions. Thus, if we admit that the great prevalence of the disease in Canada and New Brunswick is attributable to

these causes, how, he asks, can we account for its great frequency at Bermuda. Now, supposing that this and other similar objections were well established and not to be accounted for by any local atmospheric conditions with which we are acquainted, they would still be too insignificant in extent, to throw any doubt upon the value of the general law already alluded to. But in truth we suspect that these exceptions are neither so well made out nor so altogether unaccountable as might at first sight appear. As regards Bermuda, we have no documents before us which enable us to speak with certainty; but as regards Malta, to which our author also alludes as an exception, we have before us the recent work of Dr. Davy, Inspector General of Army Hospitals, who endeavours to show that the native population of the latter island in reality suffer comparatively little from pulmonary diseases, and that the troops both here and in other parts of the Mediterranean suffer less than in England, a difference which he attributes to the difference of climate. The greater frequency of these diseases among the troops at Malta than among the native population may be attributed to their dissipation, to severe sentinel duty exposing them to the night air, and generally to exposure to more considerable vicissitudes of temperature than might be expected in so mild a climate, which is subject however in the winter season to such strong winds, as to render it objectionable as a winter residence. We do not wish to lay too much stress upon these statements, but they may serve to show that until the subject is much more thoroughly investigated, we cannot admit the supposed frequency of pneumonia in certain limited localities in rather warm climates, as any argument against the proposition that it is a disease especially frequent in cold and variable climates. Indeed our author, as already observed, does not deny this, but is merely disposed, we think, to lay more stress upon the above-mentioned exceptions than they deserve. Still, however, he thinks that it is rational to attribute the general rarity of pneumonia in the West Indies to their uniformly high temperature, and the almost complete absence of barometric variations; an opinion especially justified by the fact that in one of these islands (Jamaica), where the air is more moist than in the others, and the atmospheric vicissitudes very frequent, pneumonia also is more prevalent than in most other intertropical countries. But pneumonia is not only a disease especially frequent in northern and variable climates, but is vastly more common in winter and spring when the temperature is low and variable, and the winds high and piercing, than in the summer and autumn months. Further, it is most frequent during the prevalence of northerly winds, a fact confirmed by our author's observation in Paris. Finally, in those professions where individuals are exposed to great fatigue and vicissitudes of temperature, pneumonia is two and a half times more frequent than amongst those differently situated in these respects. Upon the whole, then, if we reflect that the attack could, in one-fourth of the cases, be distinctly traced to cold, that this cause is of universal though unequal influence, and that whether in reference to climate, season, or the other circumstances above mentioned, the prevalence of the disease as a general rule, is evidently in a great degree proportionate to the extent and severity of this influence, it seems sufficiently evident that we are quite justified in extending its operation beyond the cases mentioned, and that of the remaining three-fourths, a large proportion were really induced by it. Of course it is understood that by the word cold in the above connection, we do not refer to absolute

temperature merely, but to the effect produced upon the system by a reduction of temperature, which may be favoured, retarded, or prevented, by a variety of circumstances, such as the state of the system generally, of the skin in particular, of the air in reference to dryness or moisture, &c. In extending the operation of cold beyond the limits to which our author would restrict it, we are but supporting what has been sustained by some of the best authorities of former times, and very generally held to be correct, and what moreover would scarcely, we think, have been called in question at the present time, but for a tendency in the minds of some, to require a degree of positive arithmetical demonstration which is not to be looked for in the solution of this and many other questions. We have already extended our remarks rather far upon this subject, or we might observe, that although we fully agree with our author as regards the necessity of a careful interrogation of patients, with respect to the circumstances of their attack, in order to arrive at the truth, it is worthy of attention on the other, that by too great a severity of examination, persons in the lower walks of life may be readily confounded; and again, although some may be disposed from prejudice to attribute their attack to check of perspiration, without sufficient evidence, the reverse of this is true of others, who will often deny some imprudent exposure, which in private practice other members of the family are able fully to establish. Hence it is not impossible that of the cases before us, a larger number might with propriety have been considered as directly traceable to cold. Be this as it may, we will conclude with a few remarks upon two other points interesting in this connection. Our author observes, that since men engaged in rough occupations and exposed to the weather, are most liable to pneumonia, we should expect to find it particularly rife among sailors, who on the contrary, whilst at sea, appear to be remarkably exempt from it. This exemption he is disposed to attribute rather to the regular life which they lead when at sea, than to the diminished influence of cold. When our author has once had personal experience of a sea voyage, we are sure that he will lay less stress upon the first, and also that he will become convinced of what at present he is evidently not aware of, though matter of common observation among seafaring men, that there is something in salt air preservative from cold. Every one under these circumstances has noticed how freely he may expose himself to wind and weather, cold and moisture, with scarcely a fear of these consequences, such as coryzas, sore-throat, or rheumatism, which would most certainly be his recompense for indulging in such imprudences on shore. In connection with this fact then, which we think will scarcely be contested by any experienced individual, the comparative exemption of persons at sea from pneumonia, instead of being calculated to throw any doubt over the opinion that cold is its principal cause, is on the contrary highly confirmatory of it.

Again, although it is granted that, as a general rule, those trades which require great exertion, and also exposure to the weather, offer, as before mentioned, far more numerous examples of pneumonia than those of an opposite description, it would seem that the rule is liable to certain exceptions. Thus it appears by the statement of Parent Duchatelêt, that of 670 men engaged as porters, and interrogated by him on this point, one only had had pneumonia. A similar statement is made by Thackrah, as quoted by our author in reference to bricklayers, founded upon inquiries made among 32 individuals of this trade. As these persons are much exposed

to the weather, some perhaps might be disposed to regard the above statements as good arguments in favour of our author's opinion that the influence of cold has been greatly exaggerated. In this point of view however, such statements should be received with much caution. Numerous circumstances, affecting the mode of life, &c. of particular classes in particular places, the estimation of which requires often the most intimate acquaintance with their social condition, might render such a conclusion totally inadmissible. A mode of life remarkably favourable to health in other respects, might more than counterbalance the injurious influence of exposure. Again, we must consider what is the kind of exposure, whether it is uniform or occasional, of long or short duration, accompanied by severe or moderate exercise, and so on. Now, we well know that moderate exercise and uniform exposure to the weather, are the best prophylactics against the influence of cold, and this is probably one great reason why pneumonia was so rarely found among the persons mentioned. Be this as it may, such limited statistical data, whatever may be their local value, are entirely nugatory with reference to the general proposition in question, supported as it is by such various and accumulated evidence, and confirmed by the common sense of mankind in every age. Finally, it has been said that since persons are so often exposed to cold, or have the perspiration checked without experiencing an attack of pneumonia, we must, in order to explain this as well as the different results to which it gives rise at different times, suppose a certain pre-existing organic disposition in the individual, wherever disease results. On this account, says our author, "I think that M. Chomel is perfectly right in maintaining that occasional causes have only a *secondary influence* in the production of pneumonia. That this affection, like most other internal diseases, results from an internal condition, the essence of which escapes us." That there is much truth in this view, though at the present time, we think greatly exaggerated, we will admit; but as for the conclusion that causes called occasional, and especially cold, exert only a secondary influence, it does not at all follow from the premises. As well might we say in the case of a fractured limb from a fall, that inasmuch as so many persons tumble down without breaking their limbs, the fall is of secondary consequence in such cases. Who does not see that a variety of circumstances affecting both the state of the individual and the mode in which the injury took place may increase or diminish its effects, as well as determine the character of that effect, without admitting for an instant the absurdity of its being any other than the principal cause. In short, there is nothing irrational or inconsistent with facts in maintaining that, whilst cold is the principal cause of pneumonia in a large proportion of cases, its influence is greatly favoured by a number of predisposing and concomitant circumstances, the importance of which we would not depreciate, as for instance an epidemic constitution, which at times appears to be strongly operative.

In addition to the circumstances already alluded to, many other causes of pneumonia are stated by authors; most of these Dr. G. finds unsupported by any positive facts, or exerting a very circumscribed influence.

We now pass to the third article of the chapter on etiology, in which is discussed the subject of secondary pneumonia. It is liable to occur in the course of most acute and chronic diseases. Its extreme frequency in the course of measles, whooping cough and other infantile diseases is well known. It is also met with in adults in the course of typhoid fever, phthisis, organic

affection of the heart, lung, liver, &c. In some instances, as when it follows upon capillary bronchitis, whooping cough, &c., the production of pneumonia can be explained by the direct transmission of inflammation to the substance of the lungs or by their congestion. In most cases however, Dr. G. thinks that we must look for some other influences. Fever and debility are in his opinion the two conditions which play the principal part in the production of secondary pneumonia. Of the two, he regards debility as the most important, and as the one principally operative in the production of pneumonia, in cases of organic affection of the heart, liver, lung, &c. It may act by favouring passive congestion of the lungs, or by rendering the individual more sensible to the ordinary causes of the disease. Along with debility, a long continuance in the horizontal position is also calculated to favour congestion in the most dependent portions, since as the powers of life diminish, gravitation, like the other physical laws, begin to resume their control. In this way the production of secondary pneumonia in cases of typhoid fever and analogous affections, is sufficiently explicable, but in other cases, as for instance, in organic affections of the heart, where secondary pneumonias are very common, it seems to us that we must have recourse in addition to pulmonary irritation and congestion, the presence of one or both of which can scarcely be questioned. In the concluding article of the present chapter, we are told that of 201 patients who were able to give satisfactory information on this point, 76 were labouring under a cough, when the attack of pneumonia commenced. Of these the cough had existed for years in 23, but in the remaining 53 the catarrhal affection was recent, not dating in any case beyond three weeks or a month. Acute pulmonary catarrh then preceded the attack in full one-fourth of the cases, and we are further told that in four out of five of these the pneumonia supervened without the occurrence of any appreciable accidental cause. In a few of these cases, our author thinks that we may attribute the pneumonia to an extension of the bronchial inflammation, though in most cases the latter should be regarded as predisposing merely to the former, by rendering the system more liable to be influenced by the common causes of pulmonary inflammation. Be this as it may, however, if we reflect that cold is the common cause of acute pulmonary catarrh, that the pneumonia supervened rapidly upon the latter in so large a proportion of cases, and that of these but few are included in the category of those regarded by our author as distinctly traceable to cold, we shall find another and most convincing argument for extending very greatly the number of the latter. In short, from whatever point of view we look at this important question, we find the commonly received opinion to be fully supported; and if we have extended too much our remarks upon the subject, our excuse must be found in the fact that within a few years past there is an evident tendency to attack upon insufficient grounds, certain generally received opinions, based upon common observation and sanctioned by the authority of the best practical minds in the profession. We highly approve of the present accurate methods of observation and numerical analysis, and for this reason we do not wish to see them abused, and it does seem to us that in reference to the opinion in question they have been so. Statistical data, insufficient, imperfect and inconclusive, as well as a too exclusive and rigid line of observation, have been appealed to in order to overturn it; and this course, we believe, has been in great measure dictated by an unwarrantable indisposition to admit the truth of conclusions

which have been arrived at by common observation without the aid of statistics. Whatever value we may attach to numbers, we do not agree with those who think, that, on many points at least, general observation, unaided by them, is far more likely to lead into error than truth. Such an assertion appears to us to involve the position, that the Creator has so constituted us, that in the ordinary course of human life, a large part of the conclusions to which we arrive on most subjects, must of necessity be false; a worse than absurd idea, which we would not for a moment entertain.

Symptoms.—Several of the subsequent chapters are devoted to the history of the symptoms, which are most minutely described, and contemplated in numerous points of view. For example, in the section devoted to dyspnoea and accelerated respiration, after describing what he had observed in reference to the character, frequency, &c., of these symptoms, he enters into an examination of certain opinions which have been advanced in regard to them. Thus it has been supposed that they were partly owing to the pain in the side, but on selecting 32 patients of about the same age, and in whom the disease was about equally severe, one-half of whom had severe pain in the side, the other half none or scarcely any, it was nevertheless found that the dyspnoea and frequency of respiration were about the same in each. Even in those cases where the pain in the side is very severe, our author is of the mind that it is not so much to this that the symptoms in question are owing, as to the lesion of the lung itself.

Again, it has been said that pneumonia of the summit gives rise to more severe dyspnoea than that of the base of the lung. To determine this point, our author chose as above, 44 patients of about the same age, and in whom the disease was about equally severe, in one-half of whom the upper lobe was affected, and in the other half, the lower, whilst nevertheless the dyspnoea and frequency of respiration were about the same in all. Of course, the conclusion is obvious, that the seat of the pneumonia could have had but little influence upon the severity of the dyspnoea or the frequency of the respiratory movements. As a general rule, these symptoms were found to be in proportion to the extent of the inflammation. Exceptions to this rule however, were frequently met with, and although some of them could be accounted for, as for instance, when a pneumonia of moderate extent was accompanied by extreme dyspnoea owing to its being complicated with capillary bronchitis, most of them were entirely inexplicable.

In this way each symptom connected with the chest is successively considered, after which the physical signs are taken up, one or two points merely in reference to which we shall notice. First, with respect to the configuration of the chest, we are told that in scarcely any case was any alteration observable, and further, that both the diseased and sound side were equally dilated during inspiration, except in some cases where the pleuritic pain was very severe. This last observation is strikingly at variance with the experience of Dr. Williams, who tells us that, "in the stage of hepatization, the lung being nearly inexpandible, the corresponding walls of the chest are nearly motionless."

Dilatation of the chest would seem to be the necessary consequence of extensive hepatization, and yet this has been denied on the ground of positive observation. With a view to this, our author measured with line

and compass the chests of four patients, and obtained only purely negative results. He soon, however, gave up the investigation, for being obliged to conduct it when the disease was at its height, most of the patients suffered so much as to be unable to preserve the same position for a sufficient length of time, a circumstance calculated to give rise to serious mistakes. Further, he very justly remarks, that "the fatigue of the examination, and the danger incurred by the patients from being a long time exposed to the air, imperatively demanded that he should give up such investigations, which, at last, however curious, were of no practical value." Such a reflection is highly to the credit both of the humanity and common sense of our author, who, it should also be observed, was, notwithstanding the fruitlessness of the above attempts, able to arrive at a positive result by the ordinary inspection of two cases, in which the summit of the right lung was the seat of hepatization, which had evidently occasioned a corresponding dilatation of the anterior superior portion of the right chest. Hence, he does not hesitate to admit that an inflamed lung, independently of all pleuritic effusion, may give rise to a partial or general dilatation of the corresponding side of the chest.

It has been supposed that the vibratory movement of the thoracic walls when the patient is speaking, was more marked opposite the hepatized lung than on the opposite side. On the contrary, however, Dr. G. found that in eight of ten cases where this point was attended to, the thoracic vibrations were either entirely absent, or equally felt on both sides, whilst in the two remaining ones the difference in favour of the hepatized portion was inconsiderable. It would seem, therefore, that as a diagnostic sign, this fremitus or vibration could not be much relied on. In the second article, the general symptoms connected with the circulatory and other organs are described. Among other points we observe that he has found that the urine became precipitable by nitric acid about the time of convalescence. In the few fatal cases however, in which the urine was examined, no precipitate was met with. These results nearly coincide with those obtained by Martin Solon, and confirm the general correctness of the opinion advanced by the latter, that the precipitate in question is indicative of the crisis of the disease, and of very favourable prognosis. We notice particularly our author's confirmation of this conclusion, because doubts have been thrown over their correctness by the statements of a recent writer, whose investigation as regards the urinary secretion would seem to have been of a most elaborate kind.

The symptoms of primary pneumonia having been disposed of, the modification which they undergo when the disease is secondary are next pointed out. Some of these symptoms indeed may be altogether wanting when pneumonia occurs in the course of a severe disease, which has greatly diminished the strength and deadened the sensibility of the patient, whilst others are rendered more obscure. Thus pain in the side, instead of being an almost constant attendant upon the disease, as in primitive pneumonia, seemed altogether wanting in a large proportion of cases, whilst in others it was of less severity, and this as a general rule in proportion to the advanced age and debility of the patient. Dyspnoea and accelerated respiration were nearly always present, but were remarkable in this, that their severity was often out of all proportion to the extent of the inflammation. That a very limited inflammation occurring in the course of organic disease of the heart, emphysema, &c., should give rise to ex-

cessive dyspnœa is easily understood, but it is not to such cases only that the remark applies, for Dr. G. tells us that in nearly every case of purulent resorption, the respiration became very difficult and was extremely accelerated, notwithstanding that nothing more was found after death than a few indurated spots (*noyaux*) scattered here and there through the lungs. The same is said to be true of glanders, &c. It may be doubted, however, how far in some of these cases we are justified in considering the dyspnœa as strictly a symptom of the pneumonia. May it not rather be viewed as dependent upon a disorder of the pulmonary functions, depending perhaps upon the circulation of a poisoned blood, and not necessarily connected with inflammation. Cough is mostly present, but like the pain in the side it is as a general rule less severe in proportion as the patient is debilitated. Sometimes it is so slight and comes on at such rare intervals as scarcely to attract attention. The expectoration is less characteristic, and even the physical signs, though possessing, in our author's estimation, as much value as in the primitive form, are often less marked and sometimes altogether wanting.

The progress and termination of the disease form the subject of the sixth and seventh chapters. Coincident with the resolution of the attack, there appeared some of those phenomena usually regarded as critical, in thirty-four out of one hundred and thirty cases in which the date of the commencement of the attack could be determined, and where all the phenomena throughout its course had been studied. Perspiration was most commonly met with, sometimes alone, at others combined with spontaneous deposits in the urine. Sometimes there was an herpetic eruption about the mouth. Twice our author has met with epistaxis twelve and twenty-four hours before convalescence, and in one case only a critical discharge by stool. The rarity of the latter he attributes to the fact that all the patients had used laxatives or taken the tartar emetic draught, so that it was impossible to tell how far diarrhœa might be owing to an effort of nature, or to the medication employed. He adds:—

“I believe with Baglivi, that if crises are less frequent now than they formerly appeared to be in Greece, it is probably in consequence of the more energetic treatment which is now employed in acute diseases. The great physician just cited, adds, that amongst the country people who use no medicine, crises by sweat, abdominal discharges, the kidneys and other natural passages occur regularly. I believe that this opinion of Baglivi has perhaps some foundation; for having studied the course of pneumonia in ten patients who recovered under a nearly expectant method of treatment, critical phenomena were met with in one half of them; four had copious sweats; one had an abdominal flux; the urine was examined in only one of these patients, and in that case the nitric acid produced a most abundant coagulum. It is probable that the same would have been found true of nearly all the others, at least what has been heretofore stated makes the supposition allowable.”—P. 223.

The reader will recollect that it has been already mentioned, that in almost every case where this point had been accurately investigated, the urine of those who recovered was found to precipitate by the addition of nitric acid, near the time of convalescence. Upon the whole, then, there is abundant evidence of a natural connection, either as cause or effect, between certain discharges and convalescence. As for the disease, however, being more likely to give way on particular days, our author thinks such a doctrine altogether inadmissible.

In the eighth chapter, the various complications of pneumonia, as

pleurisy, pneumothorax, bronchitis, &c. are brought under review; after which the different forms of the disease, viz. bilious, typhoid, &c.; the phenomena of convalescence, the causes of death, &c. are considered in successive chapters.

The influence exerted by pneumonia in causing or modifying other affections forms the subject of the twelfth chapter. According to our author's observation, pulmonary consumption does not often follow pneumonia, and even when it does, he thinks that the latter is to be looked upon more as an accidental than a proximate cause. When tubercles already exist, however, he admits that they are sometimes accelerated in their course by an attack of inflammation, though even this result, he thinks, is met with only in the minority of cases. In the greater number of instances, the pneumonia developed around the tuberculous masses is dissolved in a moderate length of time without any aggravation of, the primitive disease, a circumstance in which it differs greatly from pleurisy, which is rarely completely cured, when it occurs in the course of consumption. He admits also the truth of the opinion that organic affections of the heart are sometimes owing to pneumonia, but thinks at the same time that such a result is not frequent.

Neither the author nor any of the French physicians, so far as the former is aware, have ever met with cases of general dropsy which could be referred to pulmonary inflammation, which is believed to be capable of giving rise to the former, by Abercrombie and other pathologists.

Treatment. We pass over the chapters on diagnosis and prognosis, and proceed to the last, which is occupied with the treatment. Our author commences by reminding his readers that the history of symptoms, which he had laid before them, was calculated to convince them that the differences presented by the disease under different circumstances of age, constitution, epidemic influence and the like, were such that the same method of treatment could not be applicable to all. Such an opinion, he says, could only be sustained by empirical practitioners, who would reduce the difficult science of indications to the knowledge of a receipt or formula, which they blindly employ in all cases, thinking merely of the local inflammation, and regardless of those features of an attack which stamp its general character in other respects and demand a modification of treatment. The idea that any particular method of treatment, whether that by sanguine depletion or any other, is necessarily applicable to all cases, is altogether false. The capital point in the treatment consists in such a wise appreciation of those individual and general conditions which modify so deeply the aspect and character of diseases, as shall enable us to adapt our remedies with the greatest advantage to the peculiarities of each case.

The principal remedies employed are successively examined, and their influence appreciated by an appeal to the results of our author's own cases, in connection with those of other writers, some of whose statements are amply and freely commented upon.

The loss of blood is first noticed. From the earliest ages, this agent has been generally regarded as the most efficacious; by some it has been carried to an unwarrantable extreme, and by others been as unjustly neglected, so that, says our author:—

“The history of the past teaches us that neither excessive bleeding nor the expectant plan of treatment have met with such marked success as to bring about the exclusive adoption of either the one or the other. A knowledge of

this should preserve humanity from new experiments; but unfortunately the human mind profits little from the experience of the past. Thus Bordeu predicted nearly a century ago, that individuals would again arise and revive old errors, some of whom would bring into vogue again the excessive use of bleeding, whilst others would proscribe it altogether. Bordeu was right, for the period predicted by this great physician has arrived. We now see men who, faithful to the practice of *izès*, like him, bleed beyond measure; and on the other hand those who, flying to an opposite extreme, discard altogether the loss of blood in the treatment of pneumonia, and adopt a merely expectant course. Such exclusive and opposite opinions upon the treatment of a disease so well understood as pneumonia, are deplorable, for these contradictions in practice are among the most powerful arguments employed by those who are unwilling to concede that the science of medicine is possessed of any degree of certainty; but let every one cease to reproach medicine with errors which are exclusively chargeable upon those who are controlled by hypotheses (*medicins systematiques*). In order to contribute my mite towards preserving our successors from such periodical anarchy, I proceed to lay before the reader what, in my opinion, may be expected from the employment of bleeding in the treatment of pneumonia."

Most of our readers, we doubt not, will join us in affixing the seal of approbation to our author's general views on the subject of therapeutics, and it is to be hoped that his contributions in reference to the question before us may have their just influence. But, so long as the human mind remains the same, so long as there exist ardent enthusiasts to be thrown into ecstasies by plausible dogmas, or the stupidly incredulous who are ready to doubt the most ordinary truths, it is to be feared that we shall still witness the same extremes of folly, not merely in reference to pneumonia and depletion, but to other diseases and other remedies.

In the first place our author considers the question of the utility of bleeding in pneumonia; in other words, whether it is preferable to bleed the patient or abandon him to the efforts of nature. For this purpose he compares two series of cases of a mild form of the disease occurring in young subjects, in one of which moderate depletion was resorted to in the early stages, whilst in the other the efforts of nature, aided only by repose and diet, pectoral drinks and rarely a laxative, were trusted to. The result, as might be expected, was much in favour of the former, both as regards relief of symptoms and the duration of the attack. Another circumstance corroborative of this, and absolutely conclusive as regards the importance of early attention and treatment in general, is stated in the chapter on prognosis. It is there mentioned, that whilst of the patients admitted during the first three days of the attack only a thirteenth part died, of those who entered from the seventh to the tenth day, a third to a half died, there being a gradual increase of mortality from the third to the seventh days.

He next goes on to inquire whether bleeding should be practised in all cases, reminding us that although some regard the loss of blood as a specific to be always resorted to, really sound practitioners at all times have admitted that in a large number of pneumonias, sanguine emission could not be resorted to without danger, let the quantity be ever so small. He does not agree with those who proscribe bleeding altogether in infancy and old age, but concludes that it should be more sparingly and cautiously employed at these periods of life. A constitution debilitated by privation, excesses or other causes, as is well known, entirely contraindicates or admits of but a limited resort to depletion and that for the most part locally. In certain epidemics too, bleeding is absolutely contraindicated,

being often followed by the most alarming symptoms. Such consequences were observed by our author in some cases during the prevalence of the last epidemic of *grippe* at Paris. With few exceptions, he thinks that general bleeding is injurious in secondary pneumonia. As regards the presence or near approach of the menses, being, as some suppose, a formal contraindication to bleeding, he thinks the opinion not only erroneous but of dangerous practical tendency. Whenever symptoms demand the remedy we must resort to it, without reference to the menstrual flow, and in this view, he supports himself by the high authority of De La Mott and J. Frank. In cases of pregnancy, also, he says that we should not be deterred by the fear of bringing on abortion, for surely this result is more likely to follow the pneumonia if we allow it to go on unchecked. The fear of taking blood whilst the patient is in a state of perspiration, he thinks also unfounded, and says that he has never seen any unpleasant results follow such a course, an opinion which he also sustains by an appeal to the authority of Frank. Of course, as a general rule, the strength of the pulse, and the more or less inflammatory or typhoid character of the symptoms must be our great guides, whatever other condition may be present.

The question next considered is, whether we must bleed at all stages and in every degree of pneumonia. That the remedy is vastly the most efficacious when early resorted to is unquestionable, but it would be extreme to follow the advice of those who would restrict its use to the first four or five days, from an idea that when expectoration was about becoming established it was no longer demanded or might even be injurious. Indeed it may be resorted to whenever the symptoms demand its use, without reference to the period of the disease. When, however, the disorder has arrived at the third stage, and the greater part of the diseased portion of lung has passed into the state of purulent infiltration, our author has seen the most disastrous results from the loss of blood, and is inclined to proscribe it under these circumstances.

As regards the mode in which blood should be drawn, we are told that a large opening should be made in the vein where the fever is intense, as in this way the fever, oppression and cephalalgia will be best relieved; whilst on the other hand the pain in the side, which may still persist or even be aggravated, will be best relieved by local depletion, and especially by scarified cups. It is also well understood that local depletion must be resorted to rather than general, in patients debilitated by age, privations, or other causes. As regards the quantity of blood to be drawn and the frequency with which the operation should be repeated, no general rule can be laid down, and after examining the evidence of some of the chief authorities from the time of Hippocrates, Dr. G. concludes that sound practical men never thought of laying down fixed rules in reference to these points, but at the same time that as a general rule, while they bled moderately they proportioned the amount drawn to the strength of the patient and the severity of the disease. A few, however, in the present day—witness the pupils of Rasori and Tomasini in Italy, and Bouillaud in France—detract enormous quantities of blood, repeating the operation several times a day during the first few days, and, in a more routine manner than sound practical distinction would seem to warrant. The practice of the Italians our author does not criticise, having no means of comparing its results with those obtained by other methods in the same climate. He freely criticises, however, the evidence on which M. Bouillaud supports the claims of his

method, and arrives at the conclusion that this physician neither cures his patients more quickly or in larger proportion, than his fellow practitioners who pursue a different course.

Our author next proceeds to point out the results of the moderate and rational bleedings which he advocates. The amount taken being proportioned to the circumstances of the case, varied from six or eight ounces to ten pounds, not exceeding in most cases however, more than two pounds. The cases are divided into two series, in the first of which are included 50 patients, in whom the disease had not advanced beyond the first stage, and whose average age was 40 years. Of these 50 patients, five, or one tenth, died. In 32 of them, no other active treatment was had recourse to, except a mild laxative and very rarely a blister, whilst in most of the remaining 18, the bleeding, after having been repeated as often as the strength of the patients would admit, was followed by the use of tartar emetic in large doses. The patients who died lost upwards of four pounds of blood each, so that the fatal termination could hardly be attributed to a too sparing use of the lancet. The second group, in whom the disease had advanced to its second stage, comprises 182 patients, whose average age was 35 years. Of these, 32 died, or more than a sixth. Of the 150 who recovered, there were 69 in whom bleeding alone was resorted to, or else merely combined with some mild laxatives or a blister. In all the remaining 81 some antimonial preparation was employed, sometimes as an emetic, more commonly with the view of acting as a contra-stimulant, in which case it was resorted to after depletion, and sometimes not until the latter had been pushed as far as the strength of the patient would admit. Besides the more general result of mortality, duration, &c. M. Grisolle studies the influence of bleeding upon each symptom in particular. In a few instances, pain in the side yielded completely to one or two bleedings, but of the other prominent symptoms, none were completely removed in this way. A comparison of his success, with that of M. Bouillaud, leads him to the conclusion that the excessive loss of blood advocated by this gentleman has led to no more favourable results than that which follows a more rational and moderate course, and in fact that M. Bouillaud has uselessly abstracted two pounds of blood on an average from each of his patients. At the same time, such immoderate depletion, even if merely useless at the time, must, it is reasonable to conclude, be ultimately disadvantageous to many patients.

We now proceed to the treatment of pneumonia by tartar emetic in large doses. M. Grisolle first gives an abstract of the evidence on this point furnished by previous writers from the time of Rasori, from which it is to be inferred that the remedy, given in large doses as a contra-stimulant, either alone or combined with sanguine depletion, has been followed by the most happy effects. He then proceeds to examine his own cases in reference to this point. He has in all 154 cases in which tartar emetic was given, according to the plan of the Italian school. These he divides into three series. The first contains 44 cases treated exclusively by tartar emetic, without the previous or concurrent use of other active means. The second includes 80 cases in which bleeding had been first employed, but without any marked influence upon the disorder, and where the remedy was administered before the strength of the patient was so far reduced as to render further loss of blood improper. The third series contains 30 cases, where bleeding had been freely resorted

to, but where at the same time the disease had made such progress, and the prostration was such as entirely to forbid further depletion, and the tartar emetic was given as a last resort.

In the first series, the mean age was 37 years, the constitution weak or of only moderate strength in the greater number, and the disease in all of sufficient severity to render the result doubtful. The treatment was commenced at different periods from the second to the ninth day; on an average, about the fourth day. Six grains was usually given in the course of the first day, and the remedy subsequently continued in doses varying from 6 to 12 grains in the 24 hours, either alone, or combined with the syrup of poppies where its first effects had been very violent. The period during which its use was continued, varied from one to ten days, the average length of time being three days and a half; about 20 grs. of the emetic having been given altogether in most of the cases. In all these cases the primary effects of the medicine were experienced, purgation for the most part predominating over emesis, complete tolerance however being established in many after the third or fourth day. Of the 44 cases thus treated, 6 died, or rather less than one in seven. The condition of those who died, however, was not favourable, their mean age being over fifty, and the treatment not commenced till after the fifth day, one of them also being affected with such violent delirium, that the diagnosis was rendered difficult, and the remedy continued for only two days. Still, however, the result of these cases is not such as to establish the propriety of substituting tartar emetic for the lancet under similar circumstances. It should, however, be observed that bleeding was not resorted to in these cases, because the resistance of the pulse was less than usual, leading our author to suppose that not more than one or two bleedings could probably have been practised, and therefore inducing him at once to resort to the treatment above described. Under such circumstances we should have preferred moderate blood-letting, frequently repeated doses of calomel and opium or Dover's powder, with a resort to blisters, where the symptoms would admit of their use. Be this as it may, let us continue to accompany Dr. Grisolle in watching the immediate effects of the antimony upon the principal symptoms. These, i. e., the pain, the respiratory movements, the character of the pulse, of the expectoration, and the auscultatory phenomena, were most frequently improved, or even entirely gave way, within the first or second day after its administration. The rapidity with which these and other symptoms such as headache &c. were relieved by the tartar emetic is very remarkable, especially when we observe that even in a majority of the fatal cases, this happy influence at the start, was also observable. In these latter cases however, it should be noted, that notwithstanding the improvement of certain symptoms, the countenance was still indicative of severe disease, the skin had become more hot and arid, and the examination of the chest showed an extension of the disease.

In the second series, including 80 patients, whose mean age was 35½ years, the pneumonia was severe in all. At the time when the antimony was first given, it had reached in every instance the second stage. Bleeding had been first resorted to during the first 24 or 48 hours after their admission into the hospital, which was on the average, about the fifth day of the disease. The loss of blood however, which varied from one to three pounds, had never arrested the disease, and the state of the pulse was such as to admit of further depletion. The tartar emetic was then given much

in the same way as in the preceding series. The number of deaths were ten, i. e. about one in eight. The same rapid melioration of the symptoms was met with as in the first series, a very great improvement being observable in the course of the first two days, in two-thirds of the cases.

To the third series belong 30 cases, whose mean age was 49 years, and who like the preceding, took the tartarised antimony after several bleedings had been already practised, but with this difference, that further bleeding was inadmissible, the disease being far advanced (10th day), the pulse soft, the strength exhausted, and one half of the cases indeed, in a desperate condition. Of these 30 patients, 18, or nearly two-thirds, died. This result, says our author, speaks much less against the efficacy of tartar emetic than against that of bleeding, which, although freely resorted to as early as the fourth day, did not prevent the disease from making steady progress. He attributes indeed most of the recoveries to the tartar emetic, the administration of which was followed by a rapid melioration in nine cases, where life was in imminent danger.

Upon the whole Dr. Grisolle thinks that the good effects of tartar emetic in large doses, upon pneumonia, are indubitable. Under its use, the mortality was diminished, the most distressing symptoms relieved with unusual rapidity, the convalescence prompt and the strength soon re-established. As a general rule, however, he prefers that one or more bleedings should be first resorted to, as being most likely to ensure a favourable result.

Various conditions of course would contraindicate the use of antimony, such as acute inflammation of the stomach or intestines, chronic diarrhoea, &c. On this account we must be cautious about using it in the pneumonia of consumptive patients, as the tuberculous disease of the intestine might be aggravated and fatal consequences follow. The mere presence however, in ordinary cases, of some diarrhoea and abdominal tenderness, does not forbid its use, the number of stools not being increased by it, but on the contrary often diminished.

Several unpleasant effects, the most common of which is an inflammation, followed by a pustular eruption or even ulceration, of the mucous membrane of the mouth and fauces are sometimes found to follow its use. In fatal cases these pustules have been met with in the œsophagus, but in our author's experience, not beyond the cardia. In a single instance only, he found on the large curvature of the stomach an ulceration which seemed to have been occasioned by the antimony. Our author gives one case in which the most alarming symptom and death followed its administration, and remarks that there are some facts which go to show that at times the system appears to be poisoned by it. This effect is shown, not by superpurgation, but by the symptoms of collapse, a small pulse, hippocratic countenance, &c. As regards the mode of action of tartar emetic, Dr. Grisolle thinks that we cannot attribute its good effects to mere revulsion, to its emetic and purgative operation, for in cases where no evacuations follow its administration, the same rapid melioration of the symptoms is still met with. Indeed it is not reasonable to suppose that so active a substance should operate merely as an evacuant, when it is absorbed and mixed with the torrent of the circulation. That it is absorbed, seems to have been positively proved by Orfila, who in analyzing the principal viscera, especially the secretory organs, of those who died of pneumonia after using tartar emetic in large quantities, has been able to

procure the metallic antimony. He has also found it in the urine both of those who experienced the evacuant effects and of those who did not. We may conclude then that it operates in part by the altered nutrition of the tissues, consequent upon its absorption, though at the same time, its evacuant effects are not to be lost sight of. As regards the intimate nature of the action which it exercises on the tissues, or even which of these is especially influenced by it, we are in entire ignorance. Still, the occurrence of the symptoms of collapse, the complete relaxation and loss of muscular power manifested in cases where the remedy has not operated at all as an evacuant, point out sufficiently a powerful action on the nervous system.

As regards the other preparations of antimony, particularly Kermes mineral and the white oxyde, Dr. Grisolle is of the mind that their good effects in pneumonia have been much exaggerated by some, and that although sometimes useful, they should never be substituted for tartar emetic, except in cases where the digestive organs are the seat of some serious disease which the latter might aggravate.

Besides antimony, several other articles have been employed as contra-stimulants, particularly acetate of lead, digitalis and prussic acid. After making a few observations upon these, Dr. Grisolle goes on to say a few words in reference to the alterative method of treatment, under which head he speaks of calomel. He describes the mode in which it is administered by English practitioners, but declines expressing an opinion as regards its value, either alone or combined with opium, as he had never seen it used, and did not like to try it himself, not being conversant with any positive fact in its favour. At the same time, he calls upon English physicians to publish their experience on this point, taking care to study the question upon those exact medical principles which are necessary in the present day, in order to convince men of well constituted minds. This we should be glad to see; but if Dr. G. means at the same time to have it inferred that at present the English and American practitioner can appeal to no such evidence in favour of the utility of calomel as would be convincing to a man of sound mind, we think he is mistaken. What, indeed, is the ground upon which the utility of tartar emetic is mainly established? Certainly, not the diminished mortality, for this varies so little from what is met with under other methods of treatment as to bring no conviction to the mind. In fact, the mere comparison of mortality in different series of cases, in order to determine the value of a particular remedial measure, even when every effort is made to have the different series, as far as possible, properly comparable, by taking into account age, sex, constitution, severity of disease, &c., is to our minds the most unsatisfactory and perplexing of all methods; for there still remain such a number of modifying circumstances which cannot be appreciated, as to leave the result altogether doubtful, except under particular circumstances, and where the difference of mortality is very great. What then, we repeat, is the ground upon which the value of tartar emetic is mainly established? Certainly on this, that the force of the principal symptoms yields very generally and very promptly to its use. Now, although we grant that it would be satisfactory to know more accurately how often and how promptly the relief of particular symptoms takes place after the use of calomel, we utterly deny that numbers are necessary to determine the general fact; for, were this indeed requisite, we could feel confidence in the use of scarcely any remedy

which we possess, and on similar principles we should be led, on all ordinary subjects of common observation, into the most narrow-minded and desolating scepticism. Before leaving the subject, it may be well enough to say, that in this city calomel is not usually given in as large doses as that described by our author. With us, one or two grains, or even a fraction of a grain frequently repeated, and combined with opium, or Dover's powder, is commonly found sufficient. Of course, no sensible man would think of trusting to it to the exclusion of bleeding, or indeed regard it in any other light than as one among a number of efficacious remedies, especially applicable under certain circumstances and in certain cases, but by no means equally serviceable or even proper in all. After a few remarks upon the evacuant plan of practice, the various adjuvants, such as diet, position, drinks, baths, narcotics, &c., are next introduced to notice.

Opium in moderate doses he thinks may always be resorted to with safety to procure relief in cases where the pain in the side persists, the cough is very troublesome, the patient restless and unable to sleep, even if the fever should be severe. He has never observed suppression of expectoration or increase of fever, or cerebral symptoms from its use. A warm bath is sometimes very serviceable, especially in the latter stages of the disease, where the patient is convalescing, but the skin continues hot and dry and the pulse frequent. Its effect is to dissipate the acrid heat of the skin, and restore its suppleness and moisture.

In common with several French writers, Dr. Grisolle is disposed to proscribe almost entirely the use of blisters in the treatment of pneumonia. They were applied to the chest 12 or 24 hours before death in 4 fatal cases, and several days previously in 8 others; also in 26 cases which recovered, in 5 of them a little before the end of the sixth day, and in the others when the disease was on its decline, on an average about the eighth day. In but four of these cases was any amendment observed to follow the application, and even when it did so, our author is doubtful how far it could be attributed to the blister. Moreover, the duration of the disease did not seem to be shortened in consequence, or a fatal termination prevented. In a former part of the work, however, when speaking of the doubtful propriety of bleeding in the last stage of the disease, he recounts the history of an individual who was almost expiring when he first saw him, the pulse being nearly insensible, the extremities cold, &c., to whom he administered tartar emetic in large doses, and at the same time applied a very large blister. By these means a most unlooked-for amendment took place; in 15 hours the pulse had acquired both fulness and resistance, the strength was increased, the countenance more natural, and the expectoration much improved. It was now thought that bleeding might be useful, and unfortunately 12 ounces of blood were drawn, when the alarming symptoms returned, and the patient died in three hours. Certainly in this case the fatal termination cannot be attributed to any want of efficacy in the blister, to which, on the contrary, the previous amendment was probably, in great degree, attributable, an amendment too which in all likelihood would have been followed by recovery, had not blood unfortunately been drawn. Whilst, however, Dr. Grisolle is not disposed to concede to blisters any decided efficacy as a general rule, he admits that they are serviceable in one condition, and that is where, during convalescence, pain in the lower part of the chest still persists, notwithstanding previous depletion; for this pain, he says, is generally dissipated under their use. Had the

condition, of their application, as understood with us, been appreciated and acted on, we cannot help thinking that more extended good effects would have been observed. We allude especially to reserving their application to that period when the system is brought to what is called the blistering point, where the heat of skin has subsided, and the pulse has lost its resistance. Be this as it may, it will be difficult to convince practitioners in this country that they have not repeatedly witnessed the good effects of blistering, especially in cases where the disease, although partly overcome, is not rapidly advancing towards resolution, or when from the advanced stage of the disease, or other causes, the strength of the patient will not admit of depletory measures.

We will not follow our author in his observations upon the treatment of particular symptoms, the modifications requisite in the bilious and other forms of the disease, &c., but must bring our remarks, already perhaps too much extended, to a conclusion. The work closes with some just observations upon the general considerations which should guide our treatment, and a summary of its result in the cases before us. We are reminded that the physiognomy of the disease varies greatly; that no one treatment is applicable to all, but must be modified to suit particular circumstances and individual peculiarities; that at times, especially during the prevalence of an epidemic influence, it is requisite that the physician should have his mind less occupied with the mere inflammatory nature of the disease, than with the presence of certain symptoms, which give to the attack a peculiar aspect and demand a special treatment. Such is the case in bilious and typhoid pneumonias, when the symptoms indicative of these several conditions predominate; and here, says Dr. G., we have a new proof of the necessity in practice of recollecting that all diseases which are characterized by a common lesion, are not on that account to be regarded as identical and treated in the same way. The general condition of the system must be our great guide in acquainting us with the proper indications for treatment. The plan of practice to which he gives the preference in the main, consists in abstracting blood until the hardness or resistance of the pulse is reduced, and then resorting to tartar emetic before the strength is so far reduced as to render further bleeding improper. A combination of general and local bleeding is to be preferred, the latter being most serviceable in relieving pain in the side, especially when performed by means of cups. The mortality among the patients treated after this manner was only one in eight. Sometimes, however, it was found necessary to abandon this method, and resort to evacuants, or tonics or stimulants, as the peculiarities of the case might require. We have already alluded to the two prominent circumstances in which the practice usually adopted with us differs from the above, viz: in a resort to calomel and opium, and blisters, not by any means to the exclusion of tartar emetic, which however is commonly given in smaller doses, sometimes alternated with the calomel, and occasionally abandoned entirely to give place to the latter, which in some cases is decidedly preferable. Amongst children, indeed, were we obliged to confine ourselves to one or the other, we should choose calomel as being the most generally serviceable, and subject to the fewest inconveniences.

In conclusion we would observe, that the work of M. Grisolle is most complete, and must be highly serviceable as a book of reference. We say this, because the work is too voluminous to admit of its being read by the generality of medical men. It contains however, upon every question, a

vast body of information, well arranged and digested, where the reader will find a history of opinions and statements given forth by previous writers, accompanied by a full and rigid criticism, and tested by an analysis of the facts within the author's reach. With a few of his conclusions, as the reader has noticed, we do not feel disposed entirely to coincide; but as a general rule he has shown great caution and a sound discriminating judgment in appreciating his own observations as well as the statements and opinions of others. If he has occasionally attributed to a few numerical data a force and conclusiveness in reference to their bearing upon certain questions, which they do not really possess, he seems in the main to be well aware of the abuses to which the numerical system is liable, and to have been careful to avoid them. Thus in the chapter on treatment, instead of being doomed to the perusal of a mass of numerical details in reference to series of cases not properly comparable, and from which no satisfactory conclusion can be derived, we find merely a comparison of the mortality, duration of disease, &c., in different series of cases, where the severity and stage of the disease, the age of the patients and other circumstances were more or less similar, and further the free admission that in certain cases the results are still to be received with caution, owing to inappreciable differences, as for instance of epidemic constitution or the like. We cannot conclude without expressing the gratification which we have felt in the perusal of M. Grisolles's work, the main feature of which is that it contains a summary of our knowledge, with a careful examination of the facts and statements on which this is based, the whole completed by a rigid appeal to the author's own experience. Such works are greatly to be desired at the present time; and although the author may succeed in bringing out no striking novelty, he may have the satisfaction of knowing that he has assisted in sifting the true from the false, and in settling medical opinion on true grounds.

T. S.

ART. XIV.—*Traité du Ramollissement du Cerveau*. Par MAX. DURAND-FARDEL. Ouvrage couronné par l'Académie Royale de Médecine. 8vo. pp. 526: Paris, 1843.

A Treatise upon Softening of the Brain. By Dr. MAX. DURAND-FARDEL. Paris, 1843.

THE following question was proposed by the French Academy of Medicine: "What are the different varieties of softening of the nervous centres, its causes, symptoms, and appropriate treatment?" To this question M. Durand-Fardel succeeded in furnishing the most satisfactory answer, so that his essay does not come before us entirely upon its own merits, but bearing the imposing *imprimatur* of the most eminent medical association in Europe. But, perhaps the very fact that the work was prepared for contesting a prize which was to be awarded on a particular day, may have obliged its author to deal too rapidly with the valuable materials he had collected. Perhaps the very profusion of cases which he had to analyze, may have made him somewhat inattentive to style and logical arrangement. This want of clearness and precision, not so much in particular passages as in the general conduct of the work, may possibly prevent the author from receiving full justice in the abstract it is proposed to give of his treatise.