So much obscurity still attaches to diseases of the liver, that a new work on the subject is a welcome contribution to medical literature. It was with peculiar pleasure that we entered on the perusal of the treatise before us, as the name of the author was a sufficient guarantee for the value of its contents. Professor Frerichs had given evidence, in his former work on Bright's disease, of powers of clinical observation, and of microscopic and chemical research, which could not fail to illustrate any subject he took in hand. How highly he is valued in his own country is proved by his having, within the last few weeks, been appointed to succeed Professor Schönlein in the chair of Clinical Medicine in Berlin. The present work (of which the first volume only has appeared) will, we doubt not, enhance and extend his reputation.

In preference to a critical disquisition on points which might admit of controversy, we propose to lay before our readers a brief abstract of the more important contents of this volume, reserving till the work is completed observations of a general character.

The first or introductory chapter contains a short historical sketch of the views which have been entertained regarding the physiology and pathology of the liver. This is followed by a chapter treating of the relations as to size and weight of the liver in health and disease. There is probably no solid organ in the body, except the spleen, which varies so much in its dimensions as the liver; and hence its weight has been very differently estimated. The absolute weight varies so much according to the size of the individual, that it is in itself a datum of comparatively little value; thus, in healthy middle-aged persons it may vary from less than two to more than four pounds. The weight of the organ taken as compared to that of the body is of more importance, but this too may vary considerably even in health. Thus, in healthy middle-aged persons, who have been killed accidentally, the weight of the liver has been found to vary from a twenty-fourth to a fortieth of the whole weight of the body. One reason of this great difference is to be found in the period of digestion at which death has occurred. If the person has been killed while digestion was going on, the relative weight of the liver will be high; if, on the contrary, the
process of digestion was at an end, the proportion will be much lower. For instance, in a healthy male, twenty-seven years of age, who was killed by a fall from a scaffold while the stomach was full, the weight of the liver was to the whole weight of the body in the proportion of 1 to 26.5; while in a man of twenty-five, who died of tetanus, after three days of complete abstinence, the proportion was only as 1 to 40. Hence the practical conclusion, that in the treatment of chronic congestion of the liver, a rigorous diet is to be insisted on, and particularly a diet deficient in fatty materials, which, under these circumstances, are peculiarly apt to accumulate in the organ.

Frerichs then gives some elaborate tables regarding the weight of the liver in disease. Without entering into details, the following may be stated as his general results:—

1. In all acute diseases not specially affecting the liver, the relative weight of the organ is high, being in general from 1-24th to 1-30th of the weight of the body.

2. In chronic diseases, where the liver is not diseased, its weight is generally diminished; the only marked exception being in the case of tubercle, where, in consequence of waxy or fatty degeneration, its size is often increased.

3. In diseases in which the liver itself is involved, great differences are met with; thus, while in acute yellow atrophy the liver has been found to constitute little more than a seventieth of the weight of the body, it has been found in carcinoma as high as a twenty-first. The principal diseases in which the weight of the organ is increased, are carcinoma, and waxy and fatty degeneration; while it is remarkably diminished in acute and chronic atrophy, and in many cases of cirrhosis.

The third is an interesting chapter, and one of much importance to the clinical observer; it treats with great minuteness of the changes of size and position of the liver, of the modes of their recognition, and of the sources of fallacy to which the observer is exposed. The principal causes of displacement of the organ are stated to be,—original malformation, pressure from without or from within, deformities of the bones of the chest or spine, presence of tumours in the abdomen, and diseases of the gland itself. We can only allude to causes of pressure depending upon disease of the lungs; in emphysema of the lungs, if considerable, the liver is depressed to a degree varying from half an intercostal space to an intercostal space and a half; in pleurisy with copious purulent effusion, and still more in pneumothorax, there is great displacement, varying, however, according as the pleuritic disease is on one or the other side. When the disease is on the right side, the convex surface of the diaphragm presses the right lobe of the liver down, so that its lower margin is far below the ribs; the left lobe, on the other hand, is not depressed, but tilted upwards, so as sometimes to push the apex of the heart before it. When the left pleura is distended, although
the liver is sometimes depressed, it is more generally pushed over to
the right side, so that the suspensory ligament is applied against the
8th or 9th costal cartilage, the left lobe being pushed quite to the
right of the mesial line.

The remainder of this chapter is devoted to the consideration of
the practical difficulties which are met with in estimating the limits
of the liver, and which are occasioned by diseased conditions of
adjoining organs. The organs which, when diseased, most frequently
occasion such difficulties, are the following: The abdominal parietes,
owing to partial contraction of the abdominal muscles, and still
more when there is inflammatory infiltration of the tissues; the
peritoneum, especially where there is sacculated effusion, or when
there is cancerous disease of the serous membrane; finally, anomalies
of the stomach, intestines, and kidneys, may give rise to difficulties.

Many of the observations in this chapter are illustrated by very
characteristic wood engravings.

The fourth chapter treats of jaundice, its symptomatology, dura-
tion, results, dangers, prognosis, and treatment. Under this head we
can only indicate some of the chief causes of the affection.

Cases of jaundice may be divided into two great groups, the first
comprehending those where there is a material demonstrable cause of
the affection, the second including instances where there is no anatomical
change to account for it. Under the first head the most frequent
cause of jaundice is catarrhal inflammation of the mucous membrane
of the large biliary ducts, which gives rise to a temporary form of
the affection. Jaundice is produced by partial obliteration of the
ducts, which may be occasioned in various other ways; as by the
pressure of the colon distended with feces, of the pregnant uterus, or
more frequently of enlarged and diseased lymphatic glands. The gall
ducts may also be obstructed by their contents; this is most gene-

rally occasioned by the impaction of gall-stones, less frequently by
inspissated bile, and much more rarely by foreign bodies (such as
lumbrici, stones of fruit, etc.) which have entered from the intest-
tines. The most intense form of jaundice is produced by complete
obstruction of the common or hepatic duct; this may be occasioned
by adhesive inflammation, or more frequently by the cicatrisation
of ulcers of the mucous membrane, by the firm impaction of foreign
bodies, or by the filling up of the canal by cancerous growth; but
most commonly obliteration of the ducts is determined by pressure
from without, which may be caused by the formation of new con-
nective tissue, by the organisation of inflammatory products in the
gastro-hepatic omentum, by cancer of the pylorus duodenum or head
of the pancreas, by tumours of the liver which press downwards,
and by other similar affections. Finally, jaundice is a frequent
symptom of hepatic disease: all changes in the gland which render
any of the large biliary ducts impassable may produce it; thus, we
have jaundice as the result of cancer, hydatids, abscesses, etc., and
its intensity is in proportion to the number and size of the ducts
affected. The situation of the hepatic disease is also of importance; for whilst tumours or inflammation of the concave surface of the organ are generally accompanied by jaundice, in similar affections of the convex portion, or of the back part of the right lobe, it is usually wanting. In these cases, however, there is seldom complete retention of bile, unless, indeed, the hepatic duct itself is involved in the disease. Much less considerable is the jaundice occasioned by compression of the biliary ducts near their origin, of which we have examples occasionally in the course of cirrhosis. Under these circumstances, the derangement in the excretion of the bile generally limits itself to the production of more or less intense jaundice of the parenchyma of the liver, whilst the colour of the skin and conjunctiva, as well as of the urine, generally remains unchanged. In other cases, however, there is slight yellow coloration of the skin, while the stools may be of a slightly clay colour, and the urine may contain bile pigment. Still rarer is it to have jaundice as the result of fatty degeneration of the liver. Lastly, under this head may be mentioned considerable hyperæmia of the liver, especially in connection with heart disease; here the jaundice is generally limited to a slight yellow tinge of the skin or conjunctiva, which may be readily overlooked in cases where there is much flushing or lividity of the face.

The second group of cases of jaundice embraces those where no anatomical changes are met with to account for its occurrence. As causes under this head, we can merely mention mental emotions, inhalation of ether or chloroform, snake bites, purulent infection, and typhus. This chapter concludes with an account of jaundice occurring in connection with other diseases, such as intermittent and remittent fevers, relapsing fever, and yellow fever; and there is a short appendix on the jaundice of new-born children and of pregnancy.

These general considerations, copiously illustrated by cases, occupy the first half of the volume; the second part is devoted to the consideration of the special diseases of the liver. We have already stated that the work is not yet completed, and in the part now before us the only diseases treated of are—acute and chronic atrophy, fatty degeneration, pigmentary degeneration, and congestion.

The first special disease treated of is acute yellow atrophy of the liver, a term which has lately been applied to a most deadly but fortunately very rare disease. Cases of the kind have been described by various authors, under the names of typhoid jaundice, malignant jaundice, fatal jaundice from the suppression of bile, and so on; but most of these may probably be referred to acute yellow atrophy, as the disease has been named by the German pathologists. From the interest attaching to it, we propose to give a short sketch of this affection, and to speak in a very cursory manner of the other special lesions treated of in this volume.

The symptoms of acute atrophy of the liver are sometimes pre-
ceded by a premonitory stage, which, however, is often wanting. The premonitory symptoms have nothing characteristic, being ordinarily those of gastro-intestinal catarrh. The patient is out of sorts, complains of heaviness and headache, the tongue is loaded, the bowels are irregular, the belly is tender, the pulse accelerated. These symptoms are succeeded, sooner or later, sometimes not for some weeks, by a slight yellowish coloration of the skin. This jaundice may continue for a week or a fortnight before the characteristic symptoms of the affection manifest themselves. The first of the characteristic symptoms is generally vomiting, which at first consists of the contents of the stomach, afterwards of a greyish mucus, and finally of blood of a dirty brown colour resembling coffee grounds. At the same time there is severe headache, which is soon followed by delirium. The delirium is generally noisy, the patients cry out, throw themselves about, try to leave the bed, and are with difficulty restrained. At other times the delirium is of a low typhoid form. The delirium is generally succeeded by convulsions, which may involve the greater part of the voluntary muscles, or may be limited to certain groups, as to the muscles of the face and neck. Besides the convulsions, which are sometimes absent, there is almost invariably a trembling of the muscles, both of the extremities and the trunk. Gradually a stage of quietness sets in, the excitement passes into stupor, and finally into deep coma; the pupils are dilated and become nearly insensible to light; the respiration is intermittent and stertorous, and death speedily ensues. The pulse, which at first was little affected, becomes, on the setting in of the nervous symptoms, much accelerated, rising to 110, 120, or upwards. The tongue and teeth are early covered with sordes; the belly is generally tender to the touch, especially in the right hypochondriac region. The extent of hepatic dulness becomes diminished in the course of the disease, and sometimes quite disappears; while, at the same time, the volume of the spleen increases; the bowels are almost always confined; the foeces are dry, clay-coloured, and late in the disease are often dark-coloured from the presence of blood. Jaundice is constant, though seldom intense, and generally commences in the face and neck; besides this, there is often extravasation of blood into the tissues of the skin, giving rise to petechiae and extensive ecchymoses. There are frequently hæmorrhages from other organs, as from the nose, the vagina, the stomach, the intestines, the air passages. The condition of the urine is remarkable; it is secreted in normal quantity, is always of acid reaction, has a density varying from 1012 to 1024, and after the disease has continued for some time contains biliary matter. The most remarkable feature is the presence of large quantities of tyrosin, leucin, and extractive matter, and the gradual disappearance of urea and phosphate of lime.

The disease above described is of frightful rapidity, almost always terminating fatally within five days, sometimes within from twelve
to thirty-six hours from the occurrence of the characteristic symptoms. No undoubted cases of recovery are on record.

The only constant appearances met with on dissection are changes in the structure of the liver. In all cases this organ has been found much diminished in size, being sometimes considerably less than a half of its normal dimensions. On section, the liver, where the disease is most advanced, is of an ochre yellow or rhubarb colour; the blood-vessels are empty; the boundaries of the acini can no longer be recognised. At other places, where the disease is in an earlier stage, some of the capillaries are filled with blood; here and there small haemorrhagic extravasations are met with. The large veins of the liver contain a little thick blood: tufts or crystals of tyrosin have been found in the blood of the hepatic vein. It is impossible to inject the gland, as, owing to the softening of the coats of the vessel, extravasation always takes place. On making a fine section, the middle of the lobules appears of a dirty yellow colour; at the margins only fine fat globules are perceptible. The hepatic cells, at the points where the disease is most advanced, can no longer be recognised; in their place are found brownish granules and masses of colouring matter, fat globules, bodies resembling old nuclei, often mingled with crystals of tyrosin and leucin.

The gall bladder is generally empty, and contains a small quantity of a greyish dirty mucus. The biliary passages are never found obstructed, contain no biliary matter, and their mucous membrane is of a grey colour.

The spleen is generally found enlarged and congested. The mucous membrane of the stomach and intestines sometimes presents ecchymoses.

In the kidneys the glandular epithelium is generally found granular and in a state of fatty degeneration, the other tissues are loose and flabby.

The central organs of the nervous system present, in general, no morbid appearances.

The pathology of the affection is obscure; very different views have been entertained regarding it. Rokitansky supposes that the portal blood contains a great excess of biliary matter; that the tissues of the liver become saturated with bile; that the true glandular tissue fuses in consequence of biliary colliquation, and disappears. This view is unsatisfactory, and is at variance with what we know regarding the secretion of the bile. Dusch ascribed the disease to paralysis of the biliary ducts and lymphatic glands, a view purely hypothetical. Bright first ascribed the changes in the liver to a diffuse inflammation of the gland; more recently, Engel, Wedl, and Bamberger, have given their adhesion to this view, and have considered the destruction of the hepatic cells as due to a fatty degeneration resulting from a rapid process of exudation. Frerichs agrees, on the whole, with this view, in so far as that he believes a process of exudation to be the starting point of the affection. On close ex-
amination of a liver which has been affected with the disease, spots are found, particularly in the right lobe, at which the process has not been completed. In these situations changes are perceptible, which appear to prove that the destruction of the glandular element, and the collapse of the parenchyma have been preceded by hyperemia and exudation. At such spots may be seen not merely a considerable congestion of the capillaries, but in the periphery of the lobules bright grey lines, consisting of a finely granular material, with cells in the act of undergoing disintegration, whilst the cells in the centre of the lobule are still intact, and are merely saturated with bile. At a later period the congestion disappears, the grey exudation matter gradually vanishes, and the yellow remains of the excreting substance come nearer together, producing a diminution in the size of the organ, and causing the separation between the lobules to be completely lost. The destruction of the cells, as a consequence of the exudation, is partly dependent upon the accumulation of this latter in the narrow meshes of the vessels, where the effusion speedily prevents the process of nutrition from being carried on, partly upon the softening of the walls and the breaking up of the contents of the cells. As the result of the exudation in the periphery of the lobules, the origins of the biliary ducts are from an early period compressed; the bile secreted in the central part of the lobule stagnates in consequence, passes into the central vein, and so into the general circulation. In this way we are to explain the jaundice of the skin, the ochry coloration of the liver, and the paleness of the mucous membrane of the biliary passages. It has been objected to this view, which assigns an exudative process as the basis of acute atrophy of the liver, that a congestive swelling has never been observed in the course of the disease. This objection is of little weight, because in the period which precedes the occurrence of jaundice the liver is seldom minutely examined, and because a considerable increase of size of the organs is not necessarily associated with the diffuse exudation, particularly as this does not necessarily affect the whole of the gland at once.

Such is Frerichs' view of the pathology of acute atrophy of the liver, which we have given nearly in his own words. We are inclined to go along with it to a considerable degree, although we believe that the severe general symptoms are rather to be ascribed to a non-elimination than to the re-absorption of the secretion of the gland.

Of the causes of acute yellow atrophy very little is known. It occurs more frequently in females than in males; thus, out of thirty-one cases, only nine men and twenty-two women were affected. Another remarkable circumstance is that of the women affected, one-half were in a state of pregnancy; consequently, more than a third of the whole cases coincided with the pregnant condition, a circumstance which seems to point to a causal connection between the two. It is important to bear in mind that in pregnancy infiltration of the
kidneys, with fatty degeneration of the epithelium, is not uncommon. It appears that in the liver there is a tendency to a similar affection, but that the disease seldom advances so far. That acute atrophy of the liver in pregnant females is not due to a mechanical compression, as Scanzoni supposes, is proved by the period at which the disease occurs, which is generally from the third to the sixth month, seldom at the period when the enlarged uterus could act mechanically upon the liver.

Cases of this disease have been met with at almost all ages, but it is much most frequent between the twentieth and thirtieth years. Other conditions have been supposed to predispose to it. Much importance, in this respect, has been assigned to violent mental emotions. In several cases the disease has appeared to develop itself so unmistakably in previously healthy individuals, after a violent fright or a paroxysm of anger, that the influence of this cause cannot be denied. Excesses in venery, syphilis, injudicious use of mercury, habits of intoxication, and other accompaniments of a dissolute life, have been observed to precede the occurrence of the disease, though it is doubtful if they were the real determining causes. The disease has been supposed to have a miasmatic origin, and finally, it has been supposed to be occasioned by typhus fever and various abnormal conditions of the blood. On the whole, however, it may be stated that an efficient cause can seldom be assigned to the disease.

With regard to treatment, but little satisfactory can be said. English writers have praised emetics and purgatives—two methods which, no doubt, have a powerful influence upon the liver, and which, in some of Frerichs own cases, have appeared to be followed by good effects. The purgatives chiefly to be recommended are those, which act most directly upon the vascularity of the liver, namely, senna, aloes, and colocynth, in sufficient doses to produce copious evacuations. When there is severe pain in the region of the liver, cold applications may be made of, or leeches, cupping, or in full-blooded individuals even a venesection may be employed. When the characteristic symptoms of biliary intoxication, haemorrhage, and other phenomena appear, mineral acids in addition to purgatives are recommended. To allay the vomiting we may order ice, bismuth, or small doses of the aqueous extract of nux vomica. If there is haemorrhage from the stomach or bowels, we may employ ice internally and externally, alum, tannic acid, and similar astringents. When symptoms of depression of the nervous energy appear, we must give stimulants, such as ether, camphor, or musk, although we can scarcely expect any good effect to follow their employment. In cases of doubtful diagnosis, especially where the discrimination between atrophy of the liver and bilious fever is uncertain, large doses of quinine in acid mixtures may be given.

We have given thus minutely Frerichs views with regard to atrophy of the liver, because the disease, though fortunately rare, is
one of extreme importance, and because we are not acquainted with any equally complete account of the affection. A very few words regarding some of the other diseases treated of must complete our notice of the present volume.

Chronic atrophy of the liver forms the subject of the sixth chapter, and this is followed by a treatise on the fatty degeneration of the organ. Frerichs considers that the change in the cells, consisting in the accumulation of fine fat granules and drops in their interior, begins almost always at the margins of the lobules, and from here gradually extends layer by layer towards the central part. Three stages of the degeneration may be distinguished. In the first stage the cells in the neighbourhood of the branches of the portal vein contain much fat, those near the centre are normal, or contain much pigment. In the second stage the deposit of fat extends towards the centre of the lobule; only in the immediate vicinity of the intra-lobular vein are any cells free from fat. In the third stage all the cells of the lobule are affected.

With a view to determine, if possible, the circumstances under which fatty degeneration occurs, Frerichs made minute examinations of the liver in 466 cases which occurred in the General Hospital. There is nothing very striking in the results deduced. As has been generally observed, the female sex was more frequently found affected than the male, both in cases where death had been the result of disease, and where it had been occasioned by accident. Among pathological conditions, fatty liver was more frequently found associated with tubercular disease of the lung than with any other lesion. Next to this, fatty degeneration was most frequently met with in persons who had been very intemperate, or had died of delirium tremens. Frerichs very rarely found fatty liver associated with cancer; our own observations, however, differ from his on this point. As to local diseases of the liver, fatty degeneration was most frequently associated with cirrhosis and with waxy degeneration. The smallest quantity of fat was found in cases of diabetes mellitus, and in cases of obstruction of the oesophagus. The principal difference in these results, as compared with those of Louis, is that the later observer shows, what indeed has been for a good many years admitted, that fatty degeneration is not nearly so exclusively associated with tubercular phthisis as the French pathologist supposed.

The effects of fatty degeneration of the liver are, in many cases, very little marked. We find, however, that considerable accumulation of oily matter interferes with the circulation of the blood and the secretion of the bile. The capillaries, where the accumulation is considerable, are always compressed, and the liver is anaemic. Still, as the soft fat yields to the force of the blood, the pressure on the vessels is very seldom so considerable as to give rise to dropsical effusions; it may, however, give rise to chronic congestion of the gastro-intestinal mucous membrane, and occasion disorder of digestion, diarrhoea, etc. Besides the impediment to the circulation of
the blood, there is an obstruction to the secretion of the bile. The hepatic cells in the neighbourhood of the intra-lobular veins contain much yellow or brown pigment in consequence of the difficulty there is in the passing of the bile into the commencement of the biliary ducts; still this is seldom so considerable as to produce well-marked jaundice.

The eighth chapter is devoted to a consideration of pigmentary degeneration of the liver, and to the changes which the organ undergoes in intermittent fever. This is of considerable pathological interest; but as an explanation of Frerichs' views would cause us greatly to exceed our limits, we must, for the present at least, defer a consideration of it.

The ninth, and last chapter of the present volume, treats of hepatic congestion, describing minutely its anatomical appearances, its causes, and results.

We must not forget to mention, that in addition to numerous very excellent wood engravings scattered through its pages, this volume is accompanied by an atlas of highly-finished coloured plates. These are very beautiful, and though in some cases too artificial, convey a clear idea of the lesions they are intended to illustrate.

In conclusion, we would strongly recommend this work to our readers, for if finished in the same careful manner in which it has been begun, it will form by far the best treatise on diseases of the liver. We are glad to see that the new Sydenham Society proposes to undertake a translation of the work. By doing so it will confer a benefit on many of its members.

Manual of Special Pathology and Therapeutics, considered with special reference to Physiology and Pathological Anatomy. By Dr Felix Niemayer. Vol. I. Berlin, 1858.

Lehrbuch der Speziellen Pathologie und Therapie mit besonderer Rücksicht auf Physiologie und Pathologische Anatomie. Von Dr Felix Niemayer. Band I. Berlin, 1858.

Dr Niemayer is Professor of Pathology and Clinical Medicine in the pleasant little University of Greifswald; and he has produced a work on practical medicine which is infinitely more useful for practical physicians than the majority of similar treatises published in Germany. His idea in writing the book was to make the most recent physiological researches explain those pathological and therapeutical facts which have hitherto been obscure and empirical; and to show that the symptoms of any disease are but the necessary consequences of the organic changes it has produced. He has largely availed himself of the labours of Virchow, Romberg, Frerichs, Traube, and others of note in the departments of general and special
pathology; and he has based his physiological views on the investigations of all the more recent inquirers,—as Johann Müller, Kölliker, Ludwig, and Donders. The part before us embraces diseases of the respiratory and circulatory apparatus; and each of these is treated of fully, but also in a very concise and practical manner. The author has wisely avoided giving lengthy historical accounts of diseases, which, however interesting in an encyclopaedic work like Dr Copland's Dictionary, are unnecessary and cumbersome in treatises designed for the reference of busy practical men. He, therefore, at once discusses the aetiology of each disease; and then describes, 1st, its anatomical appearances; 2d, its symptoms, usual course, and probable terminations; 3d, its diagnosis; 4th, its prognosis; and lastly, its approved and rational treatment. His style is simple and clear, and he displays a great deal of shrewdness and originality in his handling of all the subjects brought under notice. As an example of his style, we quote the following interesting remarks on the much-vexed question of venesection in pneumonia, and the proper treatment of that disease:

We should never forget, in relation to treatment, that there is scarcely any disease which runs such a cyclical course as pneumonia, and that, when occurring in an uncomplicated form and of moderate severity in strong men, it nearly always spontaneously terminates in recovery. This fact has not been long known, and for this important knowledge we have to thank the expectant treatment of the Viennese school, as well as the results obtained by homeopathic practitioners. All these experiences teach us that pneumonia demands even less therapeutic interference than erysipelas, variola, measles, and other diseases having a cyclical course, where these occur in healthy patients, in a form of moderate intensity, and without dangerous complications. For it can be clearly proved that heroic measures exercise a pernicious influence on the course of pneumonia, when they are let recourse to without being absolutely required by peculiar circumstances. This is especially true of venesection. Dietl is perfectly correct when he affirms that cases of pneumonia, treated by venesection, terminate fatally much oftener than those in which bleeding has not been adopted; but he only found this to be true when he compared those cases where venesection had been used solely because the patient laboured under pneumonia, with others in which the patients had not been bled. He obtained more favourable results when he employed bleeding, not on account, but in spite, of pneumonia, in order to combat dangerous complications,—such as collateral hyperæmie, symptoms of pressure on the brain, etc. So much do I deprecate the habitual use of venesection in pneumonia, that I would far sooner entrust the life of any one who is dear to me to the care of a homœopath, than to the tender mercies of a physician who believed that he could expel the disease at the point of his lancet.

In the treatment of pneumonia, I have made extensive use of cold, and can confidently recommend my method, from the highly favourable results which I have obtained during a lengthy series of observations. I cover the chest of the patient on the affected side with napkins wrung out of cold water, and I order renewal of the cold applications every five minutes. In almost all cases, the patients feel greatly relieved after a very few hours,—the pain and dyspnœa are diminished; the pulse becomes less rapid, and the high temperature falls, often as much as a degree. The improvement (Euphorie) is often surprising, and generally is permanent throughout the illness, so that the attendants, who may at first object to the somewhat troublesome mode of treatment, gladly
persevere in its application. In very few cases does the use of cold epithems fail in giving relief; but in these exceptional cases, as its continuance would only annoy the patient, the procedure should be abandoned. I only regard cold as a palliative, for I hold that pneumonia cannot be arrested by it, although its course may be shortened, and recovery rendered easier. Under this treatment, I generally find the pneumonia terminate about the third day, in many cases on the fifth day, and rarely so late as the seventh day. I have often been unable to retain patients, who had laboured under recent pneumonia, longer in hospital than eight days.

Cold is a valuable antiphlogistic agent in the treatment of inflammations of external organs, for it contracts the swollen tissues and distended capillaries. Its efficacy is not so evident in inflammations of parts which cannot be directly reached, owing to their being covered by skin, muscles, and bones; but the contractions of the uterus and bowels, which can be induced by cold applied to the surface, show that internal parts are capable of being affected by it. The benefit of ice applied to the head in meningitis has long been recognised, and of late Kiwisch has been justly celebrated for introducing cold applications in the treatment of peritonitis. I possess no experience of the effects on repeatedly enveloping the whole body in cold wrapping, as is practised by the hydropaths; but we may judge, a priori, that such a plan would moderate the fever, if it had no direct influence on the local inflammation.

Venesection is only allowable in pneumonia in the three following cases:—1st, Where the disease has occurred suddenly in a strong, healthy man, and the pulse is above 120, and the temperature above 40° R. (120° F). The violence of the fever here indicates danger, and a full blood-letting may diminish the heat of skin and quickness of pulse. But in weakly or anemic men, venesection increases the danger of suffocation by the pneumonia; where the fever is less violent, it is not indicated, and it may not reduce the febrile condition, in which case the patient is in still greater danger, for he has to contend against high fever after he has been debilitated by the loss of blood; 2d, When collateral oedema occurs in the portions of lung not affected by the inflammation. Venesection, in such cases, diminishes the pressure of the blood, prevents increased transudation of serum into the lung-cells, and guards against death by insufficiency of respiratory surface, and poisoning by carbonic acid. As soon as, at the commencement of pneumonia, the hurried respiration does not seem occasioned by the fever, pain, and extension of the inflammatory process,—as soon as we find from forty to fifty respirations in the minute, accompanied by serous frothy expectoration,—then we may venture on a full blood-letting to diminish the amount of the blood, and to lessen the lateral pressure. And 3d, When there are symptoms of pressure on the brain—not headache or delirium—but soporose conditions, preceding paralysis, etc.

We commend this work very cordially to those of our readers who are familiar with the German language, and feel sure that it will be a favourite work of reference on all that relates to the pathology and treatment of disease.

The Cyclopædia of Anatomy and Physiology. Edited by Robert B. Todd, M.D., F.R.S., etc. 5 Vols. large 8vo. London, 1859.

The Cyclopædia is now completed. The successful termination of an undertaking so laborious and so protracted, which has extended over almost a quarter of a century, and has included contributions...
from the most eminent men in physiological science, is a great event in medical literature, of which the editor, in spite of vexatious delays, may justly feel proud. Of the work itself it is not necessary to say much. The reputation of the Cyclopaedia has long since been established as a standard work of reference on all topics of anatomy and physiology. And for this purpose it is admirably suited, not only by the great merit of the individual articles, many of which are classical monographs on the subjects of which they treat, but also by the extent and completeness of the programme, which includes every topic of importance, the most difficult no less than the best known, and what is practically useful as well as what is strictly scientific. The earlier volumes have indeed become somewhat antiquated in consequence of the rapid progress of the science; but this deficiency is amply supplied by the elaborate fulness of the recent volumes. All the subjects are illustrated copiously, almost profusely; and the bibliographies and indices afford every facility for consultation. There can be no doubt that, during its issue, the Cyclopaedia has contributed largely to the progress of physiology; it forms now a comprehensive digest of the science, and provides a wide basis for its future advancement. In a national point of view, it does honour to the medical science and learning of Great Britain.

Icones Physiologicce. ENLÄUTERUNGSTAFELN ZUR PHYSIOLOGIE UND ENTWICKELUNGSGESCHICHTE. Plates Illustrative of Physiology and Development. By Alexander Ecker, Professor at the University of Freiburg. Leipsic, 1851–59.

These plates were commenced as a second edition of Wagner's Icones Physiologicce; but the rapid advances of histology have converted a new edition into a new work. There are here 31 plates; and of the 464 figures contained in them, only 8 have been retained from Wagner's Atlas; the rest are new, and, with the exception of a few copies, all original. The credit and responsibility of the work; therefore, belong to the present distinguished editor, Professor Ecker. Three previous Parts of the Atlas, as they appeared, met with universal approval, and have supplied illustrations for many physiological text-books; the fourth and last Part, just issued, is fully equal to any which have preceded. It includes illustrations of the organs of sense, of great originality and interest. In the 18th plate, on the organs of taste and smell, the olfactory nerve cells are represented according to Professor Ecker's recent discoveries; and the 16th plate, of which the principal figures are contributed by Dr Claudius, contains a beautiful and graphic delineation of the exquisite structures situated in the membranous spiral lamina of the cochlea; the objects of so much interesting research on the part of Bowman, Corti, Kölliker, and Claudius. These, together with
the plate on the retina by Kolliker and H. Müller, and that on the touch bodies and skin, which appeared in previous Parts, form a very valuable series, representing the minute nervous apparatus of the organs of sense, which has only been discovered within the last few years. The other plates in the new Part, relating to development, and especially to the formation of the nervous and vascular systems, are excellent. The whole work, taken together, forms a pretty complete Atlas of the minute physiological anatomy of the organs of nutrition, innervation, and reproduction; and, by a judicious arrangement, the explanatory letterpress is supplied with diagrams to facilitate the understanding of difficult points. The study of plates, which are all necessarily somewhat artificial, ought never to usurp the place of the direct observation of nature; but so far as pictures can assist in giving correct ideas of minute formation—and that assistance in the present state of science is indispensable—the present Atlas will be of eminent service; it would be difficult, indeed, to surpass it, either in the instructive character of the illustrations or in the beauty of their execution.

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On the Treatment of Obstructive Ulcers and Cutaneous Eruptions on the Leg, without Confine. By Henry T. Chapman, F.R.C.S., etc. Third Edition. Churchill: London. 1859.

There is often, at the present day, a great deal of talk about a knowledge of common things. Perhaps this kind of information might be well imitated in medicine, by a more attentive study of common diseases. Every one knows what a large proportion of our out-door hospital and dispensary patients consists of persons affected with these troublesome maladies, ulcers and eruptions on the leg, which form the subject of the little work before us, which has now reached its third edition. There is nothing new in principle in Mr Chapman’s treatment; but the manner in which it is carried out is ingenious and serviceable. We are glad to observe, too, that Mr Chapman, though convinced of the superiority of his plan, does not advocate its exclusive adoption. In the present edition, a section has been added on eczematous and other cutaneous diseases of the lower extremity. Altogether, this little work has proved itself a most useful one, well worthy the attention of practical men.