they were observed to be much compressed and obstructed near their terminations in the duodenum, and it was with difficulty that a probe could be passed through them.

Clinical Remarks.—It would appear, from the symptoms, that there had been some old chronic disease of the liver, and that lately, in consequence of exposure to wet, an acute attack had been superadded. The patient had been ill a week before the jaundice appeared. There was no itching of the skin; this is sometimes, but not always, present in jaundice. Objects did not appear yellow to the patient; this they sometimes do in jaundice, but it is not always possible to assign any cause for it; it does not seem to have any connexion with the depth of colour of the skin, as there was a patient in the hospital last year, in whom this symptom was present, whose colour was but very slightly altered. She had, also, shooting pains in the loins and shoulders, most in the night; and tenderness on pressure over the entire abdomen, greatest on the right side, and also in its upper part; respiration was costal, (this might be caused by anything that made the motions of the diaphragm painful,) and the left side of the chest moved more than the right. The patient could not lie on her left side; when she did so, she felt a dragging sensation in the left hypochondrium; the stools were white, and the urine very dark; the former containing a deficiency, the latter an excess, of bile; the liver was felt as low down as the umbilicus; some bronchial respiration was heard at the upper and inner angle of the right scapula; the impulse of the heart was extended; pulse small and quick, 112; tongue red, and covered with a thick fur. Judging, then, from these symptoms, that there was long standing disease and enlargement of the liver, and that recently an acute attack had supervened, she was treated by the application of leeches to the region of the liver, and took five grains of blue pill three times a day, with some dilute hydrocyanic acid for the sickness. The application of the leeches was afterwards repeated, and a blister was applied to the region of the liver. In spite of all this she gradually sank, and died fourteen days after admission. The jaundice never varied very materially. There was albumen in the urine, but its specific gravity was high; so that no Bright's disease could be known to be present. The patient frequently complained of a sensation of fainting. In noticing the post-mortem appearances in connexion with the symptoms, the first thing that strikes us as being remarkable, is the evidence of the existence of peritonitis, partly old and partly recent, which had not been suspected during life. Most of the symptoms referred during life to hepatitis, were probably due to this—viz., the rigors; pain, tenderness, and fulness of the abdomen; perhaps also the vomiting partly; and the costal breathing. With regard to the causes of the peritonitis, the chronic portion of it was probably due to the cancer in the duodenum; it is generally consequent on some other disease, most commonly a tubercular one; but it is also frequently caused by cancer.

There was also an acute attack of peritonitis, which was probably caused by the exposure to wet, superadded to the previously existing disease in the duodenum. As generally happens in such cases, we found scarcely any symptoms referrible to the duodenum itself; for cancer of the intestines is very rarely a painful affection. The emaciation might certainly be caused by it. The vomiting was caused partly by the peritonitis and partly by the dilatation of the stomach, and accumulation of food in it consequent on the obstruction in the duodenum. With regard to the state of the tongue, we find it described as being "red, smooth, and dry." This appearance of the tongue, as Dr. Taylor has had occasion to notice before, does not point out any particular condition of the stomach, but is generally indicative of the state of the system at large. The sense of weight in the left hypochondrium was probably due to the dilatation and fulness of the stomach, and its adhesion to the liver. As is generally the case, there was no symptom referrible to the pancreas, although it was distinctly enlarged, and there was a considerable accumulation of the pancreatic secretion in it. During life there were no symptoms of the existence of cancer in the liver, and the appearance of it in this viscus is interesting. The primary cause of cancer is unknown, but when once formed, it is capable of being propagated in various ways.

The commonest and most intelligible way in which the disease is propagated, is by the circulation of the cancer cells in the blood, and the arrest of them in the capillaries; and there the cancer cells multiply and form tumours. In this case, there was no ulceration. The organs that are secondarily affected by cancer have always some connexion with the seat of the primary disease. We can easily see the connexion between cancer in the breast, and that occurring in the lungs. The veins that return the blood from the breast, empty themselves into the right cavities of the heart, and this blood is then conveyed to the lungs. In passing through the pulmonary capillaries, the cancer cells are arrested, and thus the cancer is formed. In cancer of the

stomach, whenever a secondary cancer occurs, it is almost always in the liver. The connexion between these two viscera through the portal system of veins is very evident. The only apparent exception to this rule is where, in cancer of the uterus, the liver is secondarily affected. But this is not a real exception, as, in this case, the disease almost always extends to the rectum, and the materies morbi is then conducted through the portal system to the liver. It is comparatively seldom that we meet with cancer in this viscus as a primary disease. The disease must have existed in the duodenum for some time, and the exacerbation causing the jaundice was probably produced by the recent acute attack following the application of wet and cold. The kidneys were healthy; no granular disease present. This was as had been anticipated; for although there was albumen in the urine, its specific gravity was high; there were almost universal old adhesions of both pleurae, and on the right there was a little cancerous deposit; a few miliary tubercles in the lower lobe of each lung. Thus we see, that in this case, tubercle co-existed with cancer, which is said to be a rare occurrence. We have, however, frequently met with it in the hospital; some bronchial glands were enlarged and tuberculous; this might account for the tubular breathing heard behind. No hypertrophy of the heart. The increased impulse must then have been due to the adhesions of the pleura binding the lungs, and with them the heart, to the anterior wall of the chest. The most common cause of death that we meet with in diseases generally is that by asphyxia. In this case, the patient died from asthenia, gradual failure of power in the heart, and this throws some light on the sensation of faintness so frequently complained of by the patient.

LIEBIG.—VIEWS ON GELATINE, ETC.

To the Editor of THE LANCET.

SIR,—In the article on Chemical Pathology, by Dr. Ayres, which appeared in *THE LANCET* of October 25th, there are some remarks on what he terms the "dogmatic assertions" of Liebig; and as those remarks involve, not merely points of considerable physiological interest, but appear to support the notion that Liebig is guilty of hasty generalization and inconclusive reasoning, I expected that some of his professional admirers would have replied to them ere this. Trusting, by calling attention to the matter, that this will yet be done, I will merely make a few observations on the points at issue.

Liebig states, that although gelatine or gelatinous tissue is formed from proteine, yet gelatine does not contain proteine, because the latter substance cannot be isolated from it, as it can from fibrine, albumen, and caseine, by the action of caustic alkali. Dr. Ayres, on the contrary, thinks that gelatine does contain proteine. His reasons for thinking thus are, the identity of the products from the reaction of nitric acid on albumen, fibrine, caseine, and gelatine; and the error of concluding, because particular re-agents are incapable of isolating proteine from gelatine in our laboratories, that the chemical processes in our organism are equally incapable of it.

Dr. Ayres next examines the conclusion which Liebig draws from the above statement. Liebig says, that as yet no fact is opposed to the law, that compounds of proteine are exclusively destined for the production of blood; therefore, as gelatine cannot be made to yield proteine, gelatine cannot be nutritious; and a proof of it is, that animals fed exclusively with gelatine died with symptoms of starvation. Now, says Dr. Ayres, it is really surprising how exclusive the reasoning of authors often is, and how easily are circumstances lost sight of that militate against a favourite hypothesis. Liebig, on other occasions, has stated that unless *all* the conditions necessary to the existence and growth of a being be fulfilled, no correct conclusions can be drawn; but, says Dr. Ayres, by feeding an animal with gelatine have those conditions been fulfilled? Dr. Ayres says no; he asserts that a mixed diet is in all cases necessary; and says that Majendie states that no *single* substance is capable of sustaining life for any lengthened period, since animals fed with white of egg and water, only, died with the appearance of starvation within sixty days.

Now, before this assertion of Dr. Ayres, and the statement of Majendie, can be of the least value in deciding the point at issue, we must know what were the kind of animals that were fed with white of egg and water only. Liebig says, that "the experiment of Tiedeman and Gmelin, who found it impossible to sustain the life of geese with boiled white of egg, may be easily explained, by reflecting, that a graminivorous animal, especially when deprived of free motion, cannot obtain, from the transformation of its tissues alone, enough of carbon for the respiratory process. Two pounds of albumen contain but $3\frac{1}{2}$ oz. of carbon, and a fourth part of this is given off among the last products of transformation

in the form of uric acid." We must know, therefore, whether the experiments of Majendie were performed on purely carnivorous animals, or the contrary; and we must also know, whether Dr. Ayres has tried on purely carnivorous animals the experiment of feeding one with albumen, and the other with gelatine; and whether he has tried on animals, whose respiratory processes require a more carbonaceous diet, the experiment of feeding one with pure starch and albumen, and the other with pure starch and gelatine; as this would at once determine whether the chemical processes in the organism have the power of converting gelatine into proteine.

I think I am justified in supposing, from the great research and tentative habit of Liebig, that *he* has thus experimented. I wish to learn from the learned admirers of Liebig if that be not the fact.—I am, Sir, yours respectfully,

Nov. 9th, 1845.

JOHN CHAPPELLSMITH.

THE PROJECTED COLLEGE OF APOTHECARIES.

To the Editor of THE LANCET.

SIR,—Should you think the following observations worthy a place in *THE LANCET*, you will oblige me by giving them to your readers, many of whom may continue, like myself, members of the National Association. You will perceive that I principally reiterate, with a few reflections, statements which have been made by yourself, and recently included in the very temperate and well-digested address of the LONDON COMMITTEE OF ASSOCIATED SURGEONS. What measures the Committee of the National Association may take in reference to the last amended Medical Bill, I am not prepared to anticipate, but I hope they will be induced to abandon a New College altogether, unless we can obtain it on proper terms. Now, if, as you say, the New College would not have the power to originate its own curriculum, nor, by a final examination of its members, to confer a qualification for 'practice, I ask, in the name of common sense, what would the New College be without such fundamental provisions? Would it not be worse than a toy-shop, to please lunatics and take their money? When first the Medical Reform Bill came out, the questions of education, qualification, registration, and quackery, engaged mostly our attention; but the apple of discord cast amongst us by the opprobrious charter has been sufficient, unhappily, to divert us from the straightforward path, and unless we unite in some well-defined object, as you predict, the next session of Parliament will settle our disputes in a way we may not like. It was also unfortunate that the National Association set out with the unconditional resolution for a New College; but as the Committee did afterwards entertain the question of adjustment with the College of Surgeons, they have admitted the principle of departure from that resolution, and given to us the privilege of exercising our judgment in favour of a New College or an alliance with the Old, according to circumstances. The strong objection to a New College, and which appears to have been somewhat overlooked in the indignant rising of the National Association, must always be, the want of uniformity and assimilation it would have with the excellent principle of legislation sought to be carried out for the three kingdoms. In the present constitution of grades belonging to the profession, so powerfully fixed by the old colleges, and by custom, we cannot interfere; but it appears to me we have a right to raise the question, whether the physician and pure surgeon should not first pass the examination of a general practitioner, by which he would obtain more public confidence, and more confidence and respect from the general practitioner he is called upon to meet in consultation. In the above remarks, I do not wish to prejudice the Committee of the National Association, but I would respectfully bespeak their attention, and that of all my brethren, that we ought, if possible, to become reconciled to the old colleges, and that should we fail to do so, not to accept a New College minus the two important provisions before mentioned.

I remain, Sir, your very obliged servant,
Halesworth, Nov. 10th. THOS. STOKES, M.R.C.S.

THE NATIONAL ASSOCIATION.—THE FUTURE STEPS.

To the Editor of THE LANCET.

SIR,—The "Resolution," against the fourth Medical Bill, come to by the Committee of the "National Association of General Practitioners," at their last meeting, augurs well for the cause of medical reform, it being, at once, the proof conclusive of the soundness of the views entertained by you, and those who are acting with you, as well as the demonstration incontrovertible of the erroneous character of those upon which that Committee has hitherto acted.

Charged, hitherto, with an utter want of judgment, with bad

faith, with imbecility and cunning—want of judgment, in wasting its efforts for the attainment of an object neither practicable nor desirable—bad faith, in its solitary negotiation with the College of Surgeons—imbecility, in the concession of every disputed point—and cunning, in having, by an unworthy artifice, deferred for so long a time the discussion of the minister's fourth and last Bill—it now stands convicted of gross inconsistency in condemning a measure, not essentially different from that in favour of which it so recently pronounced a strong verdict.

This "Resolution" I regard, not as a token of repentance, but rather as a manœuvre of the enemy, adopted in the expectation that through it some portion of the lost confidence of the profession may be regained, whom they would desire to suppose, that whatever their past errors may have been, their future conduct will be irreproachable. Let the profession, however, judge of the future by the past, and consider, that men who could wander out of the right path so widely, may again miss their way. Duped once, I would be chary of being made a dupe a second time.

There are now, as ever, two propositions before the profession, the one impracticable and undesirable—viz., separate incorporations; the other, attainable and most desirable, *id est*, enfranchisement in the College of Surgeons. The former proposal has been tried, and found wanting, for the attainment of the latter, no sustained and vigorous efforts have been instituted.

But one honourable course of conduct remains to the Committee of the National Association, and that is, forgetting self, and giving up their insane attempt at the establishment of third incorporation, which must, in the very nature of things, be ever an inferior and subordinate institution, for them to unite their efforts to those of that large and intelligent portion of the profession who are striving after a just recognition of the undoubted rights of the surgeons of this country in their own institution.

The questions remain to be asked, however, Will the Committee adopt this wholesome advice? Will it abandon its darling project of a new Apothecaries Act? I fear not, the old leaven will ere long, I strongly suspect, reappear. The eyes of the profession are now open, however; they will not so easily be caught slumbering again.—I am, Sir, very faithfully yours,

Notting Hill, November 12th, 1845.

AUTHUR HASSALL.

THE LAWLESS AND SECRET COMMITTEE.

"To the Hon. Secretaries of the National Association."

GENTLEMEN,—We, the undersigned, hereby request you to withdraw our names from the list of members of the National Association of General Practitioners; our doing so will intimate to you our dissatisfaction at the proceedings of the Committee of the said Association, and our want of confidence in it for the future.—We remain, Gentlemen, your obedient servants,

"THOMAS WILLEY, Surgeon.

"THOMAS WILLEY, jun., M.R.C.S.E., &c.

"W. H. MAY, M.R.C.S.E.

"Leicester, Nov. 25, 1845."

To the Editor of THE LANCET.

SIR,—We have, by this day's post, in a letter, of which the above is a copy, withdrawn our names from the list of members of the National Association, being unwilling any longer to sanction a lawless, irresponsible, self-elected, permanent Committee, whose proceedings have (by their own reporting) been at total variance with the interests of the general practitioner. We beg to add, that we are amongst those who owe to you their best thanks for the interest you have *always* taken in the cause of medical reform.—We are, Sir, your obedient servants,

THOMAS WILLEY.

THOMAS WILLEY, jun.

W. H. MAY.

Leicester, Nov. 25th.

MR. HAMMOND AND THE ANDOVER UNION.

To the Editor of THE LANCET.

SIR,—From your observations on my conduct in your number of the 22nd inst., it is quite evident that you have been totally misled as to the nature of the affair between the Board of Guardians and Mr. Westlake.

With regard to myself, it was quite impossible that I could act otherwise than as I did, when I was expressly requested by the Board to fulfil the duties of that gentleman while under suspension.

Were the poor residing in the house, and in the parish at large, to be left wholly uncared for?

As there can be but one reply to this question, I shall not trouble myself to enter further into the matter, merely suggesting that it is not impossible that I may have as large a share of professional "esprit" as my neighbours.