extending across the longitudinal fissure into the left lobe, which had almost made its way through the substance of the organ to its upper side. This mass was as large as the fist, and adhered firmly to the first and second parts of the duodenum. On both surfaces of the diaphragm (but to a less extent on the upper), between the layers of the omentum and mesenteries, and beneath the peritoneum, visceral as well as parietal, there was found everywhere a deposit of small hard tuberculous masses, the microscopic section of which resembled exactly that of the larger mass in the liver.

REMARKS. This case appeared of interest, as showing how closely the symptoms of disease of the liver sometimes simulate those of organic disease of the stomach: in fact, the cause of the most prominent symptoms was the same in this case as in cancer of the pyloric end of that viscus; viz., pressure obstructing the passage of aliment into the duodenum. The history of the case also shows that partial relief may be obtained, even in these circumstances, from the more rapid digestion of the food by means of pepsine; and may serve as an encouragement to the trial of this drug as a palliative in cases where, from the failure of strength, it is desirable to give animal food, while the irritability of the stomach causes its rejection when administered in a fluid form.

In connexion with this case of disease of the liver, short notes are appended of a remarkable tumour which was lately observed at the same hospital, having its origin apparently in a hydatid cyst; but where, from the solidification of the external layers, the usual diagnostic signs of hydatids were entirely absent.

In this case also the fatal result seems to have been due as much to the renal as to the hepatic disease. It is merely mentioned as illustrating the difficulties which may be experienced in diagnosing a pretty common ailment, and as an interesting description of the condition at which a hydatid cyst may arrive.

CASE II. Harriet G., aged 28, was admitted November 27th, 1856, under the care of Dr. Alderson. She had been ill about two months, suffering from great pain in the left side of the thorax, and in the liver, with inability to stand from weakness. The menses had been suppressed for two years. Her countenance was anxious, eyes prominent, skin jaundiced. She complained of bearing down, and of constant desire to evacuate the bowels; and seemed to have partly lost power over the sphincter. She had suffered from diarrhoea for some time, and was much reduced, with anxious face, parched lips, and dry tongue. The abdomen was dull to percussion as low as an inch below the umbilicus: pressure did not produce pain.

The treatment consisted merely in the exhibition of tonics and support, and in checking the diarrhoea by means of astringent medicines. On December 1st, she was attacked with rigors; the tumour of the abdomen began to be tender to pressure; and she lost strength rapidly, dying on December 3rd of exhaustion.

On *post mortem* examination, the thoracic viscera were found healthy, except that one of the bronchial glands was enlarged and distended with pus. The liver filled the left hypochondrium, and extended down into the iliac region; thus the left lobe was greatly enlarged. On the right side, at the upper and posterior part, a large cyst was found, projecting into the liver, and occupying nearly half the right lobe. It was adherent to the diaphragm, and overlapped by the substance of the liver, the margins of which surrounding it were irregular and dentated. The cyst had a lobulated appearance, one portion being in front, one posterior, and one along the outer margin. On cutting into the cyst, an hydatid escaped. The cyst contained also a quantity of bright yellow fluid, which was inodorous, and exhibited, with strong sulphuric acid, the reaction of bile. The cyst-wall was dense and fibrous, and lined by a gelatinous looking substance, arranged in concentric layers, very soft and friable. The anterior lobule was continuous with the posterior, but the outer one was separate; it contained the same substance as the other, but of a different colour, being of a bright green; it was also much firmer and more tenacious, and appeared to be the older growth. The substance of the liver was very pale, hard, and bloodless. The weight of the liver and cyst was 6 lbs. The gall-bladder was half full of fluid bile. The kidneys were very large, the right weighing 8 oz., and the left 10½ oz.; they were surrounded with much fat, and the cortical part was almost replaced by yellow fatty matter, the medullary substance also disappearing in places. The spleen presented a number of small abscesses scattered through its substance.

Original Communications.

SALARIES TO SCIENTIFIC MEN.

By HENRY W. RUMSEY, Esq., Cheltenham.

In a paper published in this JOURNAL for April 4th, I gave an outline of the manner in which I considered that the position of science and its cultivators might be improved through the agency of Government. A position totally different from mine has been assumed by Dr. J. E. Gray, of the British Museum, in his reply to the question to which reference was made in my former paper as having emanated from the British Association for the Advancement of Science. His opinion is, that "the position of science will be best improved by its being left entirely unfettered by any interference on the part of Government or of the Legislature": and he further deprecates any direct action of the Government in regard to the position of the cultivators of science. He also would "regret to see the number of scientific offices under the Government increased"; but he thinks it highly desirable (at least, before an increase is made) that "scientific men now holding office under Government, or under private societies, should be fairly remunerated for their labour".

As I conclude that Dr. Gray's opinions are open to general remark, I shall proceed to offer some criticism on them.

While I fully admit the importance of the facts which Dr. Gray adduces with regard to the low and inadequate rates of remuneration awarded to the officers of scientific and literary institutions in England; and while I agree with him that the strange discrepancy here existing between the salaries of highly qualified scientific *employés* and those of officers in the civil service is anything but creditable to us as a nation; I confess that it appears to me that Dr. Gray has presented but a partial and limited view of a large question, which presses daily with increasing force upon public attention, and must, at no distant period, be fairly met by the Legislature.

Now, in my opinion, it is not meeting this question fairly, to appeal to the prejudices and self-complacencies of Englishmen against foreign arrangements for the promotion and endowment of science—especially when such an appeal is calculated, if not intended, to defeat rational and feasible projects for the formal recognition of science in the administration of our own public affairs.

Dr. Gray's assertion, that science has attained a superior position and greater practical importance in England than in any other European state, seems not to be substantiated by the observations of learned foreigners.*

One could hardly expect to conciliate the goodwill and respect of distinguished philosophers on the continent, by describing them, in Dr. Gray's words, as "dressed out in orders and other gewgaws," as badges of political servitude. I doubt both the correctness and the policy of any statement to the effect that the "great body of scientific men," in the "despotic" states of Europe, are mere "servants and pensioners of the government." And I venture to repudiate the notion that a "dependent position" could possibly be rendered "palatable" to men, like themselves, of noble minds and vast acquirements, by decorating their persons with "gewgaws." As well might one hold up to contempt the professor's robe, the academic hood, the military uniform,—nay, even the ermine and the coronet which so fitly reward great services in law and in arms, in administration and in diplomacy.

Dr. Gray's main proposition is, I think, urged inconsistently with his premises. Surely, the higher the salary the more closely is the scientific officer bound to the authority which employs him, the more dependent on that authority (of whatever description) does he become.

The philosopher, in receiving a public salary, no doubt becomes a public servant; but he does not thereby become, necessarily or even probably, a political tool of a ministry of state. Instead of merely seeking to obtain respectable salaries (a very proper demand, in itself), scientific officers would, I believe, do more wisely to propose a legal *status*, an

* See Liebig's opinion, quoted in the Glasgow Report (p. lvi). See also some very sensible remarks in Henke's "Zeitschrift" for 1856, on the miserable expedients for bringing science to bear upon forensic inquiries in England. This able writer's conclusion has been thus translated:—"But John Bull's conceitedness tells him that that which he does must be the best; and it will require a good deal to make him admit that he has yet to learn much in those matters from abroad."

organised polity, such as would protect them against the unreasonable claims of corporations, boards, and bodies of trustees, to which, be it observed, they are at present quite as much in subjection in this country as foreign scientific officers are to their state governments. They might justly call upon the legislature to assimilate their position somewhat to that of the *legal* profession, the highest authorities of which, while handsomely remunerated, are nevertheless, by the British constitution, made wholly independent of political influence.

It is, however, very noticeable, that gentlemen holding scientific appointments, under English corporate bodies, public institutions, and voluntary associations, are apt enough to cry loudly for better pay, although they too often denounce, as unconstitutional, any scheme of organisation which would make their services more generally available and beneficial.

A wise Legislature and a foreseeing Government will scarcely sanction, still less interfere to enforce, a rate of salaries commensurate with the notions of learned officials, without requiring, at the same time, a regulated system of inspection and reports, so as to render scientific appointments of the greatest possible service to the community. Liberal salaries should, indeed, be paid to those who hold such appointments, but not so much for the object of raising science in public estimation, as of providing a useful and important body of public servants. A grand defect in Dr. Gray's proposition is, that he does not attempt to show how or by whom the good salaries which he asks for are to be paid. Mere exhortations to "governing bodies"—mere appeals, whether to their justice or to their mercy, are not likely to improve the remuneration, to elevate the position, or to promote the independence of the petitioners. The customary reply, though silly enough, is always at hand:—"Many persons, equally qualified, equally scientific, accomplished, skilful, and honest, are ready to undertake these duties for the salaries already paid: we cannot raise the market-price of intellectual labour." Those who are destitute of the power or of the will (perhaps of both) to think correctly on the subject, gladly accept so convenient a solution of the difficulty,—and the officers are bowed out.

"Governing bodies" are the last to discover the fallacy of their market-price theory. They do not perceive, or, at least, do not admit the obvious conclusion, that, if it be in principle just and correct, and therefore expedient, it ought also to be applied to the higher offices of the State, the Church, and the Law,—offices which, curiously enough, are often held by their own members. In determining the salaries of scientific officers, corporate bodies are not yet to be trusted; and Dr. Gray deprecates the intervention of the Legislature. Is the House of Commons, indeed, unwilling to recognise the claims of science when properly submitted to it? If it be so, which I doubt, what can we say of our boasted representative system? If, then, the Government is not to act in this matter, where is Dr. Gray's resource? But, if scientific men would take another course; if, through the British Association, they would unite in a reasonable request and a well-considered plan for organisation, by legislative enactment, so that their corps might constitute an integral part—a distinct element of the polity of the state, in both its *central* and its *local* spheres of action,—proving, also, as might easily be done, how the public would benefit to an extent far exceeding the full amount of the cost of such organisation,—there might be a fair prospect, even in this commercial country, of their proposals being received with consideration, and ultimately adopted.

QUEEN'S HOSPITAL, BIRMINGHAM: RETIREMENT OF DR FIFE. At a special meeting of the council of Queen's College, held on the 3rd instant, the Vice-Principal Chancellor Law in the chair, the resignation of Dr. Fife, one of the physicians of the Queen's Hospital, was received, and entered on the minutes. It will be seen by advertisement, that candidates for the appointment are requested to send in their testimonials on the 30th of April; that the council are pledged, in accordance with the fundamental laws of the College and Hospital, without favour or affection, to elect the candidate best qualified and most eligible, whoever he may be; and that canvassing, either personally or through friends, is strictly prohibited, and will be held to be an entire disqualification. In addition to the usual routine, the successful candidate will be required to give practical instruction at the bedside to the student; thus, the utmost possible zeal and energy on the part of the physician will be thereby secured to the patient, inasmuch as whatever is a matter of daily demonstration must be maturely and carefully reflected upon.

Gulstonian Lectures :

ON

DIABETES AND SACCHARINE CONDITIONS OF THE URINE.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS, FEBRUARY 25TH, 27TH, AND MARCH 4TH, 1857.

By ALFRED B. GARROD, M.D., Fellow of the Royal College of Physicians; Professor of *Materia Medica*, Therapeutics, and Clinical Medicine, at University College; and Physician to the Hospital.

LECTURE II.

MR. PRESIDENT AND GENTLEMEN,—At the close of my first lecture (which, from pressure of time, was necessarily somewhat hurried and curtailed), I was endeavouring to point out the frequent occurrence of saccharine urine, *unattended* with any notable diuresis; and to press the importance of attempting more accurately to diagnose such cases by other symptoms than the altered condition of the urine. I then stated, as my opinion, that there was no one symptom which could be regarded in any way as pathognomonic, but that the existence of a group might often excite such suspicions as would lead to the examination of the urine, and detection of the disease. The symptoms upon which I dwelt most strongly were the presence of slight *adema of the legs*, not arising from cardiac disease or albuminuria; and certain cutaneous affections, especially herpetic eruptions and prurigo. I also mentioned that I had met with other forms of skin-disease connected with this condition of urine; and likewise that these patients, as well as true diabetics, were very liable to boils and forms of low inflammation.

Saccharine urine is occasionally met with as a temporary occurrence in severe derangements of the digestive organs, and in chronic gout and rheumatism; and sometimes it is detected in severe and apparently functional disturbance of the nervous system.

Having passed in review the most important symptoms of this disease, I shall devote a few minutes to the consideration of the course it usually runs. I must beg of you, however, to bear in mind that my remarks at present will apply especially to the cases of confirmed mellituria, and not to such forms of saccharine urine as appear to be temporary only in their nature, or to those where the diuresis is not well marked. I must also anticipate somewhat, by stating that, although these cases can be most materially benefited by treatment, yet few, if any, can be really absolutely cured. A diabetic patient, notwithstanding he may live for very many years, and arrive even at old age, is one whose life is at all times precarious, standing as it were on the brink of a precipice; and accidents, diseases, and shocks of various kinds, which to a healthy person would be of little moment, to him may be the cause of the greatest apprehension and danger. It is not in my power to give instances from my own practice of patients who have been diabetic for a *very* lengthened period; but I can point to cases of six, eight, and twelve years standing, the urine still remaining saccharine. These cases, I fear, form the exception rather than the rule; and the lengthened course of the disease, when it occurs, is probably due to the great care exercised by the patients themselves, and is seldom found among the poorer classes, who are necessarily exposed to the vicissitudes of the weather, and at the same time are seldom able to adopt such a plan of diet as is most conducive to their well-doing.

Among the secondary affections to which diabetics are liable, may be mentioned boils and carbuncles. Dr. Prout laid great stress on the connexion between a saccharine condition of the urine and the occurrence of these affections: in his article, he observes, "Diabetes very frequently (as far as my personal experience goes, *always*) accompanies carbuncles, and malignant boils or abscesses allied to carbuncles. This is a fact mentioned by several of the older writers, and is of great importance to surgeons, who usually have the management of these affections. Some years ago, an interesting case of this kind occurred to me. The patient was a middle aged man, who told me that, for a long period, he had been subject, at intervals of a year or two, to boils, one of which, generally on the back or neck, assumed the form of carbuncle; and that, during such attacks, he always passed a large quantity of saccharine urine. When I saw him, he was recovering from one of these