

everywhere firmer than natural; slight crepitation in the upper lobe, but none whatever in the lower, which was firm and tough, but not brittle.—*Heart*: Externally, the pericardium was thickened, and traversed by numerous large vessels; it was adherent to the left pleura costalis, from the third to the fifth ribs; its cavity was much distended by a very deep-coloured bloody serum. This was not measured, but was computed to amount to between one and two pints. The whole internal surface, visceral and free, was covered with a thick layer of lymph, having a rough, granular surface: the granules were only a little finer than those of a cauliflower; in some parts, they rose into elongated and tufted excrescences; they were detached, without force, from the serous membrane. On the posterior surface of the heart, the lymph had a fibrous disposition, and being of a deep blood-red colour resembled muscular fibres. The direction of the fibres was various, but chiefly transverse to the axis of the heart. The whole of this exudation was of a uniform red colour, and much deeper on the posterior than on the anterior surface; the serous membrane beneath was much thickened and opaque, both that covering the heart and the fibrous bag. Heart not much enlarged; no engorgement of the right cavities; right ventricle moderately dilated, and a little thickened; left ventricle rather small than otherwise; walls a little thick; substance rather firm; valves all healthy; not more coagulum than usual in the ventricles.—*Abdomen*: Liver large, firm, and dark-coloured; no effusion into the peritonæum. Other parts not examined.

## SUMMARY OF THE CASE, WITH REMARKS.

*Morbid appearances, symptoms, and diagnosis*: 1. *Pleura and lungs*.—Besides the great accumulation of pus in the right pleura, the costal portion of the membrane had been destroyed to some extent by the inflammation. The right lung was compressed by the pleuritic effusion, but the left by the effusion into the pericardium. The upper lobe of the left lung was the only part of either which remained available for respiration. The illness commenced with acute inflammation of the right pleura. The attack was ushered in with violent pain in the right side. Copious effusion probably occurred at an early period, for the patient was unable to lie down during the first two or three days, and afterwards he could only lie on the back. The acute inflammation passed into the chronic form, which, with considerable empyema, existed on the patient's admission. Hence the enlargement of the right side, dulness and increased sensibility on percussion, absence of all respiratory murmur, except under the clavicle, where it had a bronchial character, dyspnoea, lividity of the lips, and decubitus upon the right side. The marked hectic fever, which existed during the whole time the patient was in the hospital, must have been due entirely to the empyema. The symptoms were, emaciation, night-sweats, frequent pulse, diarrhoea, and scanty, high-coloured, and sedimentary urine. No tubercles were found in the lungs, and it is therefore probable that there were none in the intestines to which the diarrhoea might be referred. The bowels, however, were not examined. There was some bronchitis in the left lung chiefly, as shown by the expectoration and the mucous and muco-crepitant rhonchi heard on various occasions.

*Heart*.—2. The appearances in the pericardium proved that the inflammation there must have been of considerable duration; the date of its commencement, however, can be fixed neither by the morbid appearances, nor by the symptoms. The course of the disease was latent, in the common acceptation of the term. There had been pain occasionally in the left side before the patient's admission.

July 19th.—The report states that a bellows murmur was heard over the heart. As the valves were found to be healthy, this morbid sound must have been either an anæmic murmur, or the friction sound of pericarditis. It is more likely to have been the latter, for there were other symptoms observed about and soon after this time, which are likely to have arisen from the same cause. The dyspnoea was increasing, and soon the pulse became irregular, intermittent, weak, and compressible. I first examined the patient's chest only a few hours before his death, and then there were the most unequivocal signs of pericarditis—viz., a very strong purring tremor felt by the hand, and a loud rough double friction sound over the whole cardiac region. Some of the signs deserve to be further noticed. The friction sound was heard over the whole of the left side of the chest in front; it was double, and, as usual, the diastolic portion was the louder. The sound was remarkably loud, rough, and scraping in its character, which agrees well with the great roughness observed in the false membranes covering the heart. The sounds were

loudest over the space between the third and fifth ribs, in a line with the left nipple, and it was just at the same spot that the pericardium was found to be tied closely to the costal pleura by old adhesions. It is remarkable that friction sounds so loud, rough, and extensive, and accompanied, moreover, with an increase in the heart's impulse, should be found in connexion with upwards of a pint of serum in the pericardium. It is not probable that this effusion had occurred after the signs in question were observed, because the examination was made within five hours of the patient's death. The left ventricle of the heart was rather small than large, as might be expected from the pressure of the copious serous effusion. The right ventricle was somewhat hypertrophied, no doubt in consequence of the habitual obstruction to the circulation through the lungs, of some months' duration. The great smallness and weakness of the pulse is likely to have arisen, in great measure, from the state of the left ventricle, and to the disease of the right ventricle we may chiefly ascribe the palpitations and increased impulse of the heart.

*Edema*.—There was very little œdema, and that only in the right lower extremity. The obstruction in the heart and lungs was great enough to produce it; but the emaciation and consequent diminution of the circulating mass probably prevented much fulness of the veins, and consequent dropsical effusion, from resulting. The œdema was limited to the right side, perhaps because the patient rested chiefly upon that side.

*Causes*.—No cause for the thoracic inflammations was assigned. The patient never had rheumatism. The condition of the kidneys was not ascertained; and it is not stated whether the urine was ever tested for albumen. The pleuritis began about eight months before the patient's death. It is probable that the pericarditis supervened subsequently, and perhaps not later than the 19th of July. Whether the one inflammation was the cause of the other, or whether both originated in the same common causes, and what these were, are questions which cannot be determined with certainty.

*Treatment*.—1. Before the patient's admission, and at the beginning of the illness, he was bled both generally and locally, blistered and salivated. These measures relieved some of the more urgent symptoms, but the disease continued its course.

2. After admission, emetics were given daily, and were continued during three months. Ipecacuanha was first used; then, a mixture of this with sulphate of zinc; and lastly, the sulphate of zinc alone. This remedy was clearly of service to the bronchitis; for under its use the cough almost disappeared, the expectoration ceased, and the pulse diminished in frequency.

3. For the pleuritis, counter-irritation was freely employed in addition; tartar emetic ointment, common blisters, and blisters made with nitrate of silver, and a seton in the side, were the chief measures of this class.

4. When the collection of fluid in the pleura was found to be pointing, (Aug. 7th,) an opening was made, and about a pint of pus was evacuated. On the 9th, the breathing was found to have been relieved; and on the 16th, the side had become one inch smaller. Afterwards, the opening closed; but on Sept. 8th, the matter forced its way out again, and continued to escape for some time afterwards. This evacuation of pus first occurred six or seven months after the pleurisy began, and probably, therefore, at too late a period to be of permanent use. Before this time, the lung was perhaps rendered incapable of expanding again; and as the ribs could not so far collapse as to obliterate the cavity of the pleura, this space was found, after death, to contain a considerable amount of pus.

## AMORPHOUS QUININE.

## ON THE APPLICATION OF PATENTS TO MEDICINAL PREPARATIONS.

By JOHN GROVE, Esq., Surgeon, Wandsworth.

MR. PECKSNIFF announced himself the defender of virtue—with what amount of sincerity the public are able to judge. Mr. Bullock, "in order to protect the profession from errors or sophistication, has deemed it proper to make the preparation of amorphous quinine the subject of a patent." To state that it is necessary to patent a medicine, to ensure its being properly prepared, is a direct insult to our manufacturing chemists—it insinuates, either that they are incapable of preparing the medicine, or that if they had the privilege of preparing it, that they would wilfully adulterate it, when properly prepared. Such a statement stands almost as a libel on a large and respectable class of men. There is something so

unselfish, so devoted, nay, almost fascinating, in Mr. Bullock's announcement to the profession,—for he not only tells them that he is prepared to supply the pure alkaloid (amorphous quinine) at the lowest price compatible with its purity, but that he has deemed it proper to make the preparation the subject of a patent, in order to make our profession unsophisticated and infallible—that knowing it to be quite impossible for any patent to accomplish a consummation so desirable and “so devoutly to be wished,” let us inquire into the real motives Mr. Bullock had in view in taking out his patent, and how far a grant under the circumstances is just, or even allowable.

The necessity for patenting the preparation of amorphous quinine is something unique in manufacturing chemistry; it has, as far as I know, no parallel—indeed, if it were a customary proceeding to make chemical preparations the subjects of patents, our profession, in a few years, (as new medicines come to be introduced,) may be completely at the mercy of manufacturing chemists, who, if patents can be so easily obtained, will not fail to fill their pockets at our expense, by putting an artificial price upon all new chemical preparations. I should be the last to deny to any man the right of using a discovery or an invention for his own benefit, or in any way deter him from securing an immunity from frauds or deceptions; but as Mr. Bullock stands neither as an inventor nor a discoverer of the article he has patented, I do not see that he has any rights to protect or cause to defend. On the contrary, under the pretext of securing to the profession a genuine chemical preparation, he has obtained a patent, and by its means is deriving an immense profit on an article which any other respectable manufacturing chemist can prepare as well as himself, and perhaps even better; for Mr. Redwood has stated that genuine amorphous quinine is soluble in ether, and Mr. Bullock's preparation is not so; consequently, if I am correctly informed, Mr. Bullock is indirectly acquiring an exorbitant price for a sophisticated preparation, thereby breaking his faith with the profession, to whom he announces that he will not only sell a pure medicine, but charge for it the lowest possible price.

How far is the grant of a patent just and allowable under the circumstances? I find that the two main conditions of a legal patent are—“1st, That the thing in favour of which it is granted must be a new, useful, and original invention; and, 2ndly, that the public may have the benefit of it as fully and as cheaply as the patentee himself at the end of the fourteen years, during which he is rewarded for his ingenuity by having the sole making of it. . . . A failure in these points renders the grant of a patent void.” Again, the petition for a grant must show that the petitioner has, by means of great labour and expense, made a discovery of great public utility, and that he is the first inventor.

Although there may be some new combination, if the method by which it is effected is not new also, and no new result is obtained, the discovery is not such as can be protected by an exclusive privilege. See 4, B. and A., 550. If there be any justice in law, it would be difficult to support the right of a grant for the preparation of amorphous quinine, or any other chemical preparation which results from the ordinary known laws of chemical action, and where no new result is obtained.

On referring to Godson on Patents, I find the following. P. 59, Subject of a Patent. “The requisite qualities of a manufacture. It must be perfect in itself, and the means must be adapted to the end, or the public will not receive any benefit from it.” P. 98, A Foreign Invention. “The foreign article, if it have the requisite qualities, when published in this kingdom, may, to become a new manufacture within the meaning of the statute of James, belong to any one of the classes of subjects for patents before enumerated.”

Not having the requisite qualities, is the preparation called amorphous quinine legally the subject of a patent?

The next questions for consideration are, 1st, Whether the public have any means of rendering a patent void? and, 2ndly, How are they to set about securing the object in view?

What renders a patent void?

Godson, p. 191. “If contrary to law, or mischievous to the state. The mischief contemplated may, it appears, be done, 1st, By its raising the price of commodities at home; 2nd, Being hurtful to trade; 3rd, Being generally inconvenient.”

If an inventor obtain a patent for a proper object, and give a correct specification, and it be otherwise valid, yet if it produce the baneful effects of monopolies, it will be contrary to law. All monopolies are illegal. The object of almost every patent is, to diminish the price of the manufacture, or, by furnishing a better article, to render it, at the same nominal price, of more intrinsic value. P. 195. “It is not necessary

to prove more than one objection or cause for cancelling the grant.” Lord Thurlow declared that letters patent, even if they were granted in fee, could not stand half an hour if abused. 1 Ves., jun. 118; Tidd's K. B. and C. P. Practice, 2, 1093. If the king grant anything which, by law, he cannot grant, he, *jure regio*, for the advancement of justice and right, may have a *scire facias* to repeal his own letters patent. If the patent be void in itself, *non concessit* may be pleaded without a *scire facias* to repeal it. So also the king may have a *scire facias* if a patent have been granted for an invention not new, or which has been previously used by others. And it is said to have been determined that the failure of one of several subjects of a patent vitiates the whole, because the consideration being entire, it cannot be avoided as to a part, and remain good as to the rest.

The statement of the law of the case, which affects the public, and the proof, by fact, that a grant has been made contrary to law, are the means offered us for rendering a patent void.

The method of carrying out the object in view is also pointed out to us by the law. The queen can repeal her own letters patent. This can be done only by a writ of *scire facias*, and the sovereign (if a patent be void in itself) may obtain the writ. Godson, in his “Supplement to Patents,” p. 70, says—“The expense of obtaining a *scire facias* is great, and there is much delay. By a legislative enactment, it might be much improved. The writ cannot be entirely superseded, because there should always remain in the crown a strong power immediately applicable for repealing its own improvident grants.”

The following appears to me to be the plain statement of the case. A patent has been obtained under that portion of the law which admits of the introducer of a foreign discovery standing in the light of an inventor.

The law says, a man will not be entitled to hold a grant if he has, in any manner, been informed of the secret by another person in England.—Godson, p. 53. To hold the character of an inventor he must bring with him and publish to his countrymen the productions of the genius of foreigners; “whether the invention was learnt by travel: or produced by study, it will hold good;” but in this case we have to learn whether the invention has been learnt by travel: we are quite certain it has not been produced by study, for it is merely an introduction of Liebig's discovery; so the case rests solely on the learning by travel. But suppose the patent to have been obtained in perfect accordance with the law, is it valid according to law? We have seen that a patent is void if it raise the price of a commodity at home, if it be hurtful to trade, or if it be generally inconvenient.

Now the patented amorphous quinine lies under all these charges, if Mr. Redwood's statement in THE LANCET of August 15th be correct, (and so good a chemist we cannot doubt;) for he states that the preparation is not what it professes to be, that it contains thirty per cent. of impurities, and is little better than rough quinoidine. Now this alone raises the price, for quinoidine can be bought for 2s. 6d. per ounce, and the patented preparation is charged to the profession at 8s. per ounce. It is hurtful to trade, because many may derive benefit from the manufacture of a pure article, if no patent prevented them. It is generally inconvenient, because the profession can derive no benefit, by being unable to obtain it in a pure state, which, Liebig states, is necessary, before being used for professional purposes; and above all, it is inconvenient, because the poor will not have the full advantage they might have if the manufacture were thrown open to competition.

It may be as well to mention, that inventors have been described, by a writer in the “London Journal of Arts and Sciences” for 1831, under three classes:—

The first class consists of men of genius, capable of producing important inventions.

The second consists of men who have not so extensive a scope of imagination and intellect as to project new systems or great changes.

The third is made up of men of small imagination, who are not capable of any great originality of thought, but who have a certain ingenuity which they can apply to the things that come within the range of their observation, and possess a tact for correctly and accurately executing that which they conceive.

The discovery is Liebig's; he threw it open for the public use, by means of the pages of THE LANCET, and Mr. Bullock has appropriated that to himself which Liebig has publicly distributed. Mr. Bullock should remember, that discoveries published in a journal, (or about to be published,) are not

meant to be scrambled for like farthings, and appropriated, like them, by the most successful scrambler, to his own use; he should rather consider them as so many fountains opened by men of learning and ability, at which all are at liberty to drink. The publication of a discovery is a gift to the public, and the public, I conceive, have a legal right to the gift, (if it be published by the discoverer.) On the same ground that a bequest is distributed, the intention of the testator is the guide to the distribution. But Mr. Bullock has made himself heir-at-law and residuary legatee in this case.

I have taken up my pen, in the endeavour (perhaps a vain one) to show, that if the grant of a patent can hold good for the preparation of amorphous quinine, there can be nothing in justice to deter any one from patenting any chemical which may be newly discovered; and I hold it of very great importance, that at the outset of such a proceeding we should arrest its progress, and thus prevent that which is now only an isolated case being developed into a principle. We have already too much of quack doctors, quack medicines, and secret proceedings, and no means should be left untried which may be at all calculated to make medicine and pharmacy the branches of our profession equally enlightened, honourable, and liberal. I hope it will be distinctly understood that I am contending only for a principle, and not against an individual; if, therefore, my observations appear invidious, they are not meant to be offensive, though, it must be confessed, in these days of professional oppression, it is hard to refrain from a free expression of opinion.

Having stated the whole case fairly, it now only remains for the profession to consider whether it would be advisable to appeal to her Majesty that she may exercise her power, as sovereign, to claim a *scire facias*, and declare the afore-mentioned patent as void, on the grounds above specified. If her Majesty's favour can thus be obtained, we shall, for the future, have a case to refer to, and shall, consequently, be enabled to thwart all endeavours of a like kind, should any such be made; for it cannot be denied that, in this instance, we are suffering under a burden we are not called upon to bear, and the poor are, in a great measure, shut out from the advantage they might obtain if so valuable a medicine as the amorphous quinine could be purchased at a cheap rate.

Wandsworth, Sept. 1846.

#### REMARKS ON

### THE BOARD OF COMMISSIONERS IN LUNACY,

AND THE MODE IN WHICH ITS DUTIES ARE PERFORMED,

*As instanced in the atrocities of Haydock Lodge.*

By WILLIAM SMITH, Esq.,

LATE HOUSE-SURGEON TO THE LINCOLN LUNATIC ASYLUM, AND MEMBER OF THE ASSOCIATION OF MEDICAL OFFICERS OF HOSPITALS FOR THE INSANE.

IN THE LANCET for September 12th, I find some remarks by Mr. F. J. Wintle, of the Warneford Asylum, who appears to be desirous of breaking a lance in defence of those deeply persecuted individuals, the commissioners in lunacy.

The remarks referred to by Mr. Wintle apply to those gentlemen in their public capacity: they are receiving large sums from government, and all their travelling expenses &c. are defrayed out of the public purse. I therefore consider that they, as well as any other body of public men, are fair game for attack, provided they do not display proper vigilance in the discharge of their duties.

Mr. Wintle appears to wonder what grounds there are for any attack upon these immaculate gentlemen. Has Mr. Wintle seen the *Times* newspaper for August 27th, 1846; if so, is he of opinion that the commissioners faithfully discharged their duty of supervision in the case of the Haydock-Lodge Asylum? By whom were those iniquitous and revolting practices upon the defenceless patients brought to light? Not by the commissioners in lunacy certainly! notwithstanding the report of those atrocities, and other gross instances of neglect, forwarded to Dr. Hume by Mr. William Graham, the resident surgeon (at that time) of the Lincoln Asylum—a person who ought to know something of the management of lunatics. How comes it that these learned gentlemen did not publicly denounce the principle of a private asylum being conducted by Mr. Charles Mott, who, if not actually at the time an assistant poor-law commissioner, at all events was an auditor of the very district wherein his own private madhouse was situated. Their ignorance relative to this improper connexion is no excuse for them; as Mr. Wakley justly observes, "they ought to have known of it." Then again, were they not grossly culpable in not having made a searching investigation imme-

diately on the receipt of Mr. W. Graham's complaint in November? Their investigation does not take place until the following May. The thanks of the community are justly due to Mr. Wakley and Dr. Roberts for the steps they have taken to bring the affair to light: the following letter of the last-named gentleman, addressed to Mr. Wakley, appears to show the thing up most completely.

Castle Hill, Bangor, August 23rd, 1846.

"SIR,—Though personally a stranger, I am inclined to address you by having seen the notice of a motion you are about to make in reference to Haydock Lodge. My object in doing so is to call your attention to the lunacy commission, with a view to show the utter inefficiency of that body, as at present constituted, to protect the unfortunate inmates of lunatic asylums against brutal and inhuman treatment. I brought the cruel treatment experienced by patients confined in Haydock Lodge, and specifically the case of the Rev. Mr. Richards, under the official notice of the commissioners early in the month of February. When some weeks had elapsed, I became convinced that some secret influence was at work to cushion the serious charges which I had preferred, so as to screen the proprietors of the establishment: under this conviction, the correctness of which subsequent circumstances have fully confirmed, I prepared a petition, which the Hon. W. O. Stanley did me the favour of presenting to the House of Commons.

"In calling for a return of the documents from the commissioners, I had declared my intention to bring the subject before parliament. Subsequently, in the month of May, I was requested by the secretary, Mr. Lutwidge, to furnish the commissioners with the names &c. of the witnesses upon whose testimony I relied to prove the charges I had made. In the month of June, to my great astonishment, I was informed by Mr. Stanley that the commissioners had adopted the novel and extraordinary course of making a report to the Secretary of State, in which they impugned the credibility of some of my witnesses without ever having seen or asked them a single question. In the month of July, after the publication of the petition, and the notice taken of its contents by the *Times* newspaper, the witnesses were summoned with such precipitancy, as to render it almost impossible for them to appear in due time at the commissioners' office in London; indeed, one female was served with a summons at half past twelve in the day, calling upon her to appear in Spring Gardens at nine o'clock the following morning. As I before showed, my charges had been preferred in February, and yet, serious as those charges were, and involving, as they did, the treatment of nearly 500, mostly pauper, lunatics, yet the commissioners took no efficient steps to investigate them till the 10th of July. But it seems that the wretched state of the inmates of Haydock Lodge had been brought specifically under the notice of the commissioners as far back as November; for on my return home from London, on the 12th of July, I found a letter addressed to me by a medical gentleman residing at Crewe, (Mr. Graham,) in Cheshire. This gentleman states explicitly, that having visited Haydock in the month of November, he reported the dreadful state the place was in to Dr. Hume, and another commissioner. That letter is now in the possession of Mr. Stanley; its contents, in substance, are to the following effect. He visited Haydock Lodge in November last; he found the place, at eleven o'clock in the day, shamefully dirty, and the male patients ragged and filthy. There were two persons dying with diarrhoea in an apartment that was used as a sitting-room by other patients; he found a patient named William Whittaker, who had been removed from the Lincoln Asylum to Haydock Lodge, with his face so black and disfigured with bruises, that he could hardly recognise him; he, though the resident medical officer of the Lincoln Lunatic Asylum, was not permitted to see any of the private patients. (Mr. Graham then expressly states that he immediately afterwards reported what he had seen to Dr. Hume and another commissioner.) I have been refused a copy of the report which the commissioners made to the Home Office, impugning the credibility of my witnesses before they examined them! nor have I seen the one which they made after that ceremony had been gone through. I have, however, good reason to know that every allegation contained in my petition was more than fully substantiated by the evidence produced; and I am fully convinced, had it not been for the presentation of that petition, and the notice taken of its contents by the *Times* newspaper, that the enormities of Haydock Lodge might have been perpetrated with all but impunity. The housekeeper that was at Haydock, and whose conduct was referred to pointedly in the evidence, is now, I believe, the matron of an union workhouse,