

easily accounted for; the oxygen is attracted by the heated metal, and unites with it, and the hydrogen is liberated.

The alleged improbability of the large quantities of the two gases which are requisite to form the water of the globe existing in nature has very little weight. In the same way we might disbelieve half the facts in astronomy; but this is not very scientific reasoning any more than the next argument, which stands thus—water is a powerful extinguisher of flame; therefore it is unlikely for it to be composed of inflammable materials.

Now, if in chemistry it were a law that the properties of compounds necessarily assimilate to those of their constituents, this argument would have much weight; but as every chemist knows that the very contrary may be, and often is, the case, it has none whatever. Water is not the only compound of combustible substances that is potent in extinguishing; carbonic acid (like it, made up of inflammable materials) acts quite as effectually. What is the usual phenomenon of combustion? Why, the combination of carbon and hydrogen with oxygen, forming carbonic acid and water, which, having reached their highest state of combination or combustion, are obviously incapable of burning any more; but as by their contact with flame they prevent the access of uncombined air or oxygen, they stop the combustion.

As for Dr. Priestley's always finding the water produced by the union of the two gases, acid, I believe the cause to have been some impurity in them, and I do not see how the fact is otherwise explicable either on Mr. Stevenson's or the common opinion.

And now let me notice a fact or two, certainly difficult of explanation, on the supposition of water being a simple body. How, on such hypothesis, can we account for the constant presence in water of oxygen, always in a definite proportion, and in so firm a state of combination, that no means we at present possess will separate even an atom of this without also setting free an equivalent of hydrogen, and *vice versa*. This is a well-established fact; the experiments which prove it are so well known that I need only mention one—viz., the decomposition (as I think we are still justified in terming it) of water by the voltaic current, by which hydrogen and oxygen are always evolved rigorously, in the proportions of two volumes of the former to one of the latter. Now, is the oxygen here held in solution by the water? then why is it always in one proportion, and as constantly with an equivalent quantity of hydrogen? If water were a simple body, it would not, judging from its behaviour with respect to other gases which it dissolves, always contain the oxygen in one proportion, nor would it cling to it with such tenacity that the gas can never be separated without causing the fluid to change its form! In short, all facts at present lead irresistibly to the conclusion, that the presence of oxygen is absolutely essential to the existence of water, and in a state of chemical combination; and unless Mr. Stevenson can prove the contrary, by producing water from hydrogen without oxygen, or in showing a specimen of water from which no oxygen can be obtained, his gas theory must be considered as exploded.

I remain, Sir, yours obediently,

Kirton-Lindsey, April 8, 1850.

H. J. WATERLAND.

## MURDERS BY INSANE PERSONS.

To the Editor of THE LANCET.

SIR,—Two or three weeks ago, an insane person, named Pearson, murdered his medical adviser, Dr. Wilson, and the latter's mother. It appears that the patient had been formerly in a lunatic asylum, for having threatened to kill a clergyman, and my object in writing is, to inquire, through your pages, if any information can be obtained, by whose authority or advice this man Pearson was liberated from the lunatic asylum, and permitted to go free.

It appears to me very obvious that the party or parties, whether parochial, medical, or other, who sanctioned his being set at large, after his having manifested so decided a disposition to murder, as to warrant his being once shut up, are in some measure responsible for the dreadful murders which have ensued, and that the relatives of the murdered parties ought to have grounds for raising an action of damages and compensation for the loss and shock which they must have sustained.

Several cases of this kind have lately happened, and, so far as I can perceive, no adequate notice has been taken by either the medical or general press, of the atrociously-culpable negligence which must have been chargeable somewhere, and on some parties, for allowing insane persons who had manifested

homicidal tendencies to be at large. We earnestly trust that this notice of the subject may, by awakening the attention of the profession, spare us a repetition of such a revolting and disgraceful tragedy as the late one at Juniper-green.

It may be said, "What! shut up a man for life because he has *once* been the subject of homicidal mania?" We reply decidedly in the affirmative. We point to the many instances, similar to the above, which justify the measure. We may pity the patient, but we ought to look upon the necessity for his restraint as but an unavoidable consequence of the previous misfortune (insanity) inflicted on him by Providence. While we commiserate him we must not forget the same, whose lives are every moment in jeopardy from the possible recurrence of the most fitful and capricious of all diseases.

The restraint need not, in all cases, be to the walls of an asylum, but, in favourable cases, may consist in the constant superintendence of a responsible keeper. The point we insist on is, that an insane person who has once manifested unequivocal signs of homicidal tendencies, ought *never* thereafter to be wholly his own master.

The relatives of the insane, if in suitable circumstances, should, of course, be compelled by law to provide adequate restraint, and should be made responsible for any untoward results arising from their not having done so. Insane paupers should be confined or guarded at the public charge. The expense would be inconsiderable. Probably there are not ten persons in Scotland, and three or four times that number in England and Ireland, who, were such a law as I speak of put in force to-morrow, would require keeping, in addition to those now under restraint. And what would be the paltry expense to the public of taking charge of this small number, in comparison to the importance of the good obtained, and to the prevention of such hideous catastrophes as that of Juniper-green?

I am, Sir, your obedient servant,

Norfolk-terrace, Westbourne-grove, West.

ROBERT DICK.

## THE REGISTRATION OF DEATHS, AND MEDICAL CERTIFICATES.

TO THE REGISTRAR GENERAL.

SIR,—Hitherto I have considered that the "medical certificate of the cause of death" was a protective security demanded from the medical profession by the public—that is to say, an official guarantee that death had fairly fallen to the person. I likewise considered that when this document was withheld, but one other functionary (for every medical man, from the nature of his vocation, is necessarily a public officer) could supply the deficiency, and that in this case it was imperative on him to do so, since the local registrar, without the one testimony or the other, could not legally furnish his certificate. The second party to whom I allude is the coroner. I thought that in the event of no medical man having been consulted, and no suspicion attaching, that the testimony of a person present at the death was sufficient for its due registration—although, by the way, I always considered that even here a medical certificate should not be dispensed with—since there should be an accredited medical man even to report on this, and thus, as it were, hem in death by the police of medicine and the court of the coroner.

I have become, however, painfully aware of the fallacy of all this supposition, lately. My own child died. I forwarded by the undertaker the usual medical certificate to the registrar of my district. This was put aside, with the observation that it was worthless, and that some one must attend who had witnessed the decease—a servant would do. I attended myself, and, as a private individual, did *as well* as a servant; and so the matter ended. I learned from the registrar that this was not an exception in my case, but his practice invariably. Thus it seems that three persons may be living together; two of these may conspire to kill the third, and the testimony of one of the conspirators is enough for the burial of the victim. Even more; if it may have answered the purpose to call in a medical man, whose suspicions may have been just enough excited to cause his withholding his certificate, still, even with this known to the registrar, (so supposing it,) the requirement of his office can be readily supplied.

There is in this a wilful laxity of protection to the public, very scandalous to common sense, but perhaps very creditable to the official feeling which begets it—the genuine English official feeling of degrading the medical profession. The medical profession can very well afford this, in a nation of shopkeepers and harpy attorneys, where respectability means paying the way, and learning the mire of man's roguery. But still one would think that both respectability and learning