Of the effect caused by the inhalation of even very small quantities of sewer miasms, M. D'Arcet, has put upon record a remarkable instance. He states that, in Paris, there was a small lodging consisting of a bed-room and ante-room, which had been successively tenanted by three vigorous young men each of whom died within a few months of his occupying the place. M. D'Arcet, was requested to examine the rooms, and ascertain the cause of the evil. He found that a pipe from the privy in the upper floor, ran down by the side of the wall near to the head of the bed where the inmates slept. The pipe was unsound, and the wall was damp from leakage of the soil into it; but there was no perceptible smell in the room when it was examined; nevertheless, M. D'Arcet had no doubt, that the deaths of the former occupants were referable to the emanations from the wall. The pipe was repaired, and from that time, the unwholesomeness of the place was cured. What can tell more strongly than this, of the evils arising from defective pipes, or bad drainage in regard to the soil of a water-closet or the sewage of a city? We could give many other examples, but this for the present, must suffice. We hope, however, we have said enough to show, how dangerous it is to live in the neighbourhood of bad drainage and sewage smells, and how necessary it is to remove all causes of offensive and injurious miasms, not only from the immediate vicinity of our private dwellings, but from the premises in which we may be conducting our daily business. In the above case, the point to be observed is, that there was no apparent cause for the death of the young men; there was no smell in the room: nothing to be seen that could indicate danger to health; yet the work of certain poisoning went silently and surely on, without exciting the slighest suspicion of the cause even in the victims themselves.—*Sanitary Reporter.*

PROSSER'S LIME LIGHT.

The Lime Light has recently been introduced, on trial, into lighthouses, where it promises to prove a formidable rival to Holmes' electric light. At the South Foreland Point, Mr. Prosser's lamp for the production of lime light was placed three years ago in the upper lighthouse. The lamp was fixed in the centre of the Fresnel apparatus, which had already been employed with the electric light, and which was adjusted to the use of a forewicked oil lamp, the burner of which was 3¾ inches in diameter. We take from the report of Professor Faraday, made to the Trinity House, on the 11th of June, last year, an account of the light, in regard to its working and success in the Upper Lighthouse at the South Foreland.

"The lamp consists of a central octoedral prism of quicklime, built up of many small pieces of lime, from chalk; it is about 3⅛ inches in diameter and 16 inches long. It is supported by a clock, which, when in action, lifts it perpendicularly, at the rate of one inch per hour. Eight gas-jets, conveying mixed oxygen and hydrogen, are placed at equidistances around this lime, in a horizontal plane. When the gases are lighted and directed against the lime, they produce eight places of intense ignition; and as the lime core is about 11.4 in circumference, the centres of these eight frames are about 1.4 inches apart.

"The lamp practice in the lantern is very easy; the jets are easily and safely lighted and adjusted. The action then goes on for hours together without change. The clock raises the lime; draughts do not effect the light; there is apparently no circumstance present which can cause derangement, and, as far as appears by theory or practice, the lamp may be left until sunrise untouched, provided gas be regularly supplied from below. The lamp is easier of management than a common lamp. It is easily replaced, in case of need, by the ordinary oil lamp; and that has been done in times varying from seven minutes to ten minutes or more.

"The light produced is very white and beautiful in character, far surpassing that of oil or gas flame in its intensity, but not equal to the electric spark; but then it is much larger in dimension. It is the light of a planet, whereas the electric light is like that of a star. It streams out from the lantern over the surrounding space in great abundance.

"The good and constant condition of the lamp will depend upon the sufficient and steady supply of the gasses required. At present these are oxygen and hydrogen.

"The oxygen is made by the ignition of the native peroxide of manganese, in iron retorts fixed in a furnace, heated to bright redness by coke.

"The oxygen after being passed through a washer, is conducted to a gas-holder capable of holding 600 cubic feet of gas; it is outside the building, appears to be steady in its action, and fit for its peculiar service. The pipes conveying the gas are 1¼ inches diameter outside the tower, and one inch in the tower. No inconvenience has as yet been experienced, at Westminster Bridge or elsewhere, from the action of cold on such exposed pipes. There are cocks at the gas-holder, and also in the lantern, governing the progress of the gas; the pressure upon it, when the lamp is burning, is six inches of water.

"The hydrogen gas is at present made by heating to redness a mixture of equal weights of iron borings and crushed coke-dust in iron tubes placed in a special furnace, and then passing over it a stream of steam. There are three tubes, which require only once charging for the day; and they, with the furnace, seem to do their duty very well. The gas is passed through a washer, as in the former case, and then on to a gasometer of the same size and arrangement as that for the oxygen. A sufficient supply for the nights consumption is produced in three hours.

"There is an apparatus for the generation of hydrogen by the action of diluted sulphuric acid on iron or zinc. It consists of three large earthenware bottles; it has been used, and may be used again if occasion require it. Two men were at work in the gas department.

"The whole quantity of gas burnt in the 12 hours upon the six jets is about 560 cubic feet, which is nearly at the rate of 7·7 cubic feet per jet per hour. The proportion of the two gasses is about 248 oxygen to 312 hydrogen, or 1 to 1.26; if the gases were pure it should be as 1 to 2. The introduction of the common air at the charging will account for much of this—impurity of the manganese for much more."—*Social Science Review.*