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City Graveyards and Funerals.

A false view of religion has been the means of entailing upon many generations an evil of the greatest magnitude: we allude to graveyards in cities. When we boast of a civilization superior to that of the Greek or Roman, our boast should always be modified with some striking exceptions. The old Roman law allowed of no funerals except without the walls of the city. This wholesome law was broken by the professed Christians, in an age when darkness covered the land; and the evil has come down to us, is among us, and it sometimes admonishes us by those stern and terrible monitors—pestilence and death. A law was passed in the late British Parliament, which enacts that graveyards in London shall be closed forever after July, 1851. This law is good—it is only a great pity that such a law was required at this late day. In New York the evils of city interments are well known, but for a fine, the charnel-house will open its portals and gratify the statute—a statute which the rich can set aside—the poor, never. This evil, however, may be said to be so small in the lower part of the city, as scarcely to deserve the name of one. This is no doubt true; but in the upper part of our city, for which a different law has been provided, the evil is a crying one, especially the vault system—it above all, deserves the severest censure. In some churches the gold-getting spirit is most reprehensibly developed. They have adopted a kind of warehousing system, combining part of their churches as receptacles for the dead, where, for certain sums coffins remain as goods in a bonded warehouse. In the cellar of one church, we have seen the coffins of those who died of cholera, piled in rows, beneath the very floor where the members met for worship. What a crying evil.

In connection with interring the dead, it is really grievous to see how much the spirit of mammon enters into every transaction, so as to make the bereaved pay well for the decent interment of the departed. If a new cemetery is to be opened, it will be held up as a philanthropic object, a commendable undertaking worthy of patronage, and so it would be, were it not for the stock-jobbing spirit which envelops all such projects, for the purpose of coining money out of every turf devoted to cover the remains of our fellow mortals. The working men of our city pay high rents while they live, and they cease not to contribute to the same class of landlordism when they die.

There should be a law made forbidding all city interments for the future, in vault or churchyard, and were it possible we should like to see some means instituted, whereby those in the laboring walks of life would not, as now, be overwhelmed with the tremendous expenses which meet them at every step when fulfilling the last sad rites of sepulture, in decency, to their deceased relatives.

Elevated City Railroads.

We have received two communications within as many weeks, upon the subject which forms the heading of this article: the ideas in both are somewhat alike. They advocate the utility and advantages of a railroad above the side-walks. This subject has been before the public for a number of years; it is now, we think, five years since Mr. Randall first exhibited his "Elevated Railroad" for Broadway, to be propelled by stationary power, to make one set of carriages run in the one direction, and the other train in the contrary direction. Mr. Randall's plan was well conceived, and his model, which was exhibited three years ago, developed no small amount of ingenuity, and it worked well. We have seen no plan superior to his. R. V. De Witt, C. E., of Albany, constructed a good model of an elevated railway, which is now in the rooms of the Institute, along with drawings of the whole plan.

An underground or cellar railway was also proposed about a year ago, but although the

plan was a good one to save street room, the expense of constructing such a railroad, would be enormous, and subterranean navigation would be anything but agreeable to the denizens of Gotham. We never expect to see either a subterranean or elevated railway in Broadway. Our reason for this opinion is, we do not see any necessity for them. Why make a subterranean railway, or why make an elevated railway? Surely it is more plausible to make an elevated walk for foot passengers, or a subterranean one for the same purpose, but we see no necessity for either. Those who imagine our streets to be very crowded, have different ideas of crowded streets from what we have. At any rate, all crowding of streets could be avoided by laying the rails on *terra firma*. We have never seen a good objection urged against a street railroad, and consequently none in favor of an elevated one, so long as the other plan is more feasible, and can be constructed at a tithe of the expense. A number of lines of railway through the different streets, would obviate all the crowding into one general thoroughfare, and we have no doubt but we will yet see lines of railways branching through the city, drawn by unsmoking engines, conveying passengers quietly, safely, conveniently and regularly through every part of our city.

Light from Water.

A short time ago we received a short communication from Mr. T. Prosser, C. E., of our city, who is an inventor and man of science, in relation to "the Electric Water Light." The article principally directed our attention to the expose of the "Resin Water Gas," of Mr. White, of Manchester, England, and which was exhibited at Castle Garden during the last Fair of the Institute. The expose is by Prof. Fyfe, Professor of Chemistry in King's College, Aberdeen, and published in a late July number of the "London Mechanic's Magazine." In that article Prof. Fyfe states that Mr. White had estimated his oil-gas produced from resin, to mix with hydrogen, at too high a per centage, and that his water gas (hydrogen dropped on a red hot chain or small pieces of metal), was useless to mix with the resin gas for illuminating purposes,—that the water gas was *nil*—only adding to the quantity but detracting from the illuminating power of the resin gas, which White mixed along with his hydrogen.

Mr. Prosser says, "I have also passed hydrogen through turpentine, and am inclined to believe that it has the effect upon its illuminating qualities described by Mr. Matthiot in the Scientific American, but I cannot believe that the turpentine is not thereby sensibly diminished."

A late number of the *Manufacturers' and Farmers' Journal*, Providence, R.I., contained a letter from a correspondent; he says:

"I caused the hydrogen to be generated in the vessel containing the turpentine, in such a manner that the particles of the gas might come in contact with the fluid soon after their liberation, while they were yet in their nascent state. On kindling the jet thus obtained, a beautiful white light presented itself, perhaps superior in illuminating power to that produced by the best burning fluid. As the action continued, however, the flame presently grew darker, especially at its upper part which was evidently loaded with particles of unconsumed carbon. A piece of glass held over it was soon coated with lampblack.

Suspecting these results to be due to the volatilization of a portion of the turpentine occasioned by the heat attending the production of the hydrogen, I lastly took a vessel containing merely the oil of turpentine, and having raised its temperature by immersing it in a mixture of sulphuric acid and water, I introduced, as at first, a stream of hydrogen. A jet of mingled gas and vapor escaped, which, on being kindled, gave me the same white and beautiful light as in the preceding experiment. As I raised still further the temperature of the turpentine, and caused more of its vapor to pass over with the hydrogen, the combustion was rendered incomplete, and the flame, as before, became smoke. Allowing the vessel, on the other hand, to cool down to the ordinary

temperature, the light gradually declined in brightness, until it at length became too faint to be of any practical utility.

It has been stated that the hydrogen does not take up any appreciable quantity of the turpentine in passing through it—that it is merely *catalyzed*. To settle this question, I weighed the vessel with its contents, both before and after the experiment. In the first case, in which I employed the turpentine cold, I found that 40 grains had disappeared; in the second instance, when I raised its temperature, there was a disappearance of 90 grains—a quantity in either case as great as would have been expected from the amount of light produced. I see in these experiments no reason for believing that the hydrogen enters into union with the turpentine, or is in any way modified by it. The vapor of the latter, unaltered, may readily be detected in the jet, both by its odor and by precipitating it on any cold body, and it is undoubtedly to the combustion of this, rendered more intense and perfect by the presence of the hydrogen, that the peculiar brightness of the light should be attributed."

As this is a subject which has attracted a great deal of attention from the statements which have been made about Mr. "Paine's Light," we consider it to be our duty to throw all the light we can—fairly and openly—on the subject. We took the ground at first that hydrogen could not be produced cheaply. We have allowed room for the discussion on both sides—for figures to be shown "to prove all things," and we have seen no reason adduced for altering our opinion. Holding these opinions, we candidly admit that we have had no sufficient open experiments to prove the difference in economy between coal, or resin, and the electric carbon, "water carbon," and the hydrogen turpentine lights. It would require a fair competition between an "old coal gas company," and a "new light company," to prove which could manufacture light at the lowest price. We well know what wonders were to be performed by the "oil-gas companies," (making gas from oil) a few years ago, and how thousands were expended, and companies formed but to tumble down; and we are not forgetful, either, of the excitement created by the "Crutchett light," in Washington, a few years ago. All these have failed to compete, in the production of cheap light, with those companies who make it from cheap hydro-carbons—such as resin and coal. We must, however, admit that it is easy for Prof. Fyfe to knock White's house down about his ears, with a few figures all on one column, but there are always two sides to an argument, and when we know that no gas gives out any light until a certain amount of heat is communicated to it, we may also conclude, with the author of the article quoted above, that hydrogen has some effect in the perfect combustion of the carbon, and assists to produce a brilliant light; and to show that Prof. Fyfe may be mistaken, we will quote an article next week, from the *Liverpool Mercury*, showing the success of "White's Light." We would publish it now, but this article is of sufficient length upon one subject at once.

The London Industrial Exhibition.

A letter from the Hon. Abbott Lawrence to Prof. W. R. Johnson, recently received, makes the following appeal to his fellow citizens in the United States to do themselves full justice at the exhibition in London, in 1851:

I am happy to inform you that arrangements for the proposed exhibition are now being made upon an extensive scale in France, two thousand persons having, as I learn, already entered their names in France as exhibitors. Every country in Europe will contribute to this great show, and Egypt, Persia, India and China are preparing the products of their skill and labor for the exhibition. I believe that nearly all nations will come here in 1851.

I cannot but entertain the sanguine hope that the citizens of the United States will avail themselves of this opportunity not only of exhibiting the various products of our skill and labor, but induce as many men as possible to come here who possess the ability to

profit by what they see produced by other countries. I believe, in a commercial point of view, we may reap great advantages by increasing our exports. To the inventors, mechanics, and skilful men in the arts and productive sciences, it will be eminently useful to come here and examine the products of mind and labor that will be brought together from all parts of the world; and above all, we have the opportunity of impressing upon all nations the extent, resources, and power of our great and favored country. If we present specimens of our minerals, agricultural products, manufactures, and inventions from the various States of the Union, I am sure that we shall make a deeper impression upon the public mind (as a nation) than could be accomplished by the exhibition of fleets and armies. If we come here as exhibitors of the progress we have made in the industrial arts, pray let it be in our full strength and power. It is one of those occasions when we should do our best. I will suggest the necessity of the early appointment of an agent in London to receive the articles intended for the exhibition.

New Muzzle for Rifles.

The muzzle of the rifle, as it is ordinarily constructed, must be made a little larger than the main bore of the rifle barrel, in order that the instrument may be loaded. By making the muzzle larger than the bore of the barrel, practical gunners think that the force of the charge is diminished, and the aim at the mark or object is rendered less certain. Hence, has been experienced a difficulty, and to remove the difficulty has been a great desideratum among gunsmiths. The Boston Cabinet remarks: We have lately seen a new muzzle, designed to remedy the difficulty, at the Rifle Barrel factory of Messrs. Thomas C. Smith & Co., Worcester, Mass. The new muzzle has a bore, tunnel-shaped, partly,—the bore in the bottom of the new muzzle being of exactly the size of the bore of the rifle barrel and the bore in the top of a new muzzle being larger, to receive the charge and ball designed to be introduced into the rifle, to which the new muzzle is applied. The new muzzle, during the process of loading, is fastened to the end of the rifle barrel by means of four dowel pins, which are suited to four holes, drilled into the end of the rifle barrel. When the rifle is loaded, the new muzzle can be easily displaced from the barrel, and may be carried in the gunner's pocket. Not being so much as even an amateur sportsman, we cannot judge of the utility of the invention. And yet we are aware of the fact that Messrs. T. C. Smith & Co., are answering frequent orders for the new muzzle.

[The above we extract from an exchange, and as we have seen it slightly altered in more than one paper, it may be as well to throw some light on the subject.

There is a Patent Loading Muzzle, termed "Clark's," which, if not new, is good; there is no question about that. Mr. E. Wesson, deceased, the famous rifle manufacturer at Hartford, Conn., owned the patent, but since his death it has been bought by Mr. Clark, Jr., we believe. Those who desire to get enlightened on the subject, have but to consult that excellent book, the "American Rifle," by J. R. Chapman, C.E., one of our ablest correspondents.

Telegraph Case.

Last week, before Judge Kane, Philadelphia, U. S. Circuit Court, the case of Morse's Assignees against Bain's Assignees, for infringement of Morse's Chemical Telegraph Patent. The motion was for an injunction to restrain the defendants from infringing. The case was set down for final hearing on the 11th of next April. Why don't the assignees of Morse bring up the case in New York, where the fullest light could be thrown upon the subject.

Upwards of one thousand Irish immigrants have arrived at Boston during the past week. While thousands of the Irish are immigrating to this country, the Scotch farmers are leaving their country and emigrating to Ireland, to take possession of the good tillage land lying waste for want of cultivation.