



NEW YORK, JUNE 16, 1849.

Street Cleaning.

Our citizens appear to be sublimely wide awake to the importance of dirty streets. Our city authorities appear to have the most scientific views of routing out the mud by getting into the mire. Troops of street cleaners are employed to hoe and sweep up street accumulations, and in order to do this smartly, a poor fellow has to keep one eye on the look out for the stages, for fear of being run down, and the other at his hoe or birch broom. The result of this system is beautiful small heaps gathered up near the pavement, in a beautiful long space of time, and as it is not convenient at all times for the mud carts to follow the sweepers, ten chances to one if the dogs, stages, carriages and carts don't have some fine fun in dancing over the same dust or mud after it has been three or four times heaped up by the scavengers. Our storekeepers, especially the tall ones in Broadway, have a fine way of keeping the side walks clean, by making them dirty. The way they do this is highly creditable to the intelligence of the age, and as the citizens of distant cities may desire to know about these things in order to copy the fashion of the Great Metropolis, we hereby append the method and charge nothing for the information.

Any person who has been in Broadway between 7 and 8 A. M. knows full well that there is nothing to be seen but a torrent of human beings rushing along with hurried tread. This is the grand period our storekeepers take advantage of, to wash their sidewalks with Croton and free them from the accumulated dust of the previous day. The scientific result of this is a perfect laying of the dust, with the deposit of a fine stratum of mud.—When the sidewalks are wet, on comes the crowd with the soles of their brogues well moistened to make the dry dust at the crossings adhere to them finely for a safe deposit on the first wet sidewalk. Every person who has paid any attention at all to the evil we speak of, knows, that our sidewalks a short time after being deluged with water in the mornings, present the appearance of mud puddles. The consequence of this is, that in the afternoons, if there is the least wind stirring, the atmosphere of Broadway especially, presents the appearance of a storm in the desert of Sahara. It is dangerous to the daylight and we should think more so to the goods of our merchants. Every person then seeks a bye street, in preference to walking up thro' the principal thoroughfare. It is a wonder that our merchants have been so long blinded to a remedy for this evil. The only way we can account for it, is to lay the blame on the dust having blinded their eyes. The remedy for the two evils we have pointed out, is to clean the streets and sidewalks after twelve o'clock at night and have them finished before five in the morning. There should also be more hydrants arranged along the sidewalks, by which some person appointed for that purpose, may go along and attach a pipe with a rose on the end of it, to sprinkle the streets at regular intervals. This would surely be a superior and cheaper system than the present ineffective one of sprinkling the streets with a horse and cart carrying a hoghead of water to keep down the dust upon the famous old principle that was invented by Janes Van Scrans in the year one.

American Carpets.

There are a great number of carpets manufactured now in the United States. No country in the whole world uses so many as ours. Among no people are they so universally employed as articles of domestic luxury and comfort. This is as it should be, the raisers of wool, the dyers, spinners, and weavers have surely a pre-emption right to a good carpet. This right is not either really or jocularly known among the working people on the oth-

er side of the big salt pond. The working people of England know nothing about the use of carpets in their houses, and they are not considered by the higher classes as having any right to such things. What? a British journeyman shoemaker or blacksmith having a carpet in the house—the thing would be considered preposterous, and if such a thing could be, it would certainly call forth the eloquence of Parliament for the passage of some bill to restrain the extravagance of the working classes, for whom, in the eyes of hereditary pride, bacon or brose, (in stinted quantity) is good enough food, and calico, corduroy, and Galashiel good enough and plenty enough of clothing. In our country the mechanic claims a carpeted room as an inherent right, and hence we have a larger market for carpets among our people than among the same number of people in any other country. The carpet trade of the United States is very extensive. There are large factories in Lowell, and Roxbury, Mass., Thompsonville and Tariffville, Ct., the large one of Messrs. Higgins in this city, factories at Auburn, N. Y. where beautiful carpets are made, and there are many other factories in this and other States that we might mention, but we do not write this article for that purpose. One object is to speak a word for the right of working men to enjoy those things. Domestic comforts have a most beautiful influence in elevating the human character. Another object is to correct a very common error among our merchants, (who ought to know better,) and the public generally, respecting the colors of American and English carpets. It is a common opinion among our people who are unacquainted with "applied chemistry," that the English carpets are made of more permanent colors than the American carpets. We were surprised at a fact that came within our observation last week, of an English Turkey carpet being chosen in preference to an American one, altho' the latter was a superior article and of a more beautiful pattern. We enquired the reason of the choice, and was told that it was owing to the quality of the colors of the English carpets being more permanent than the American, and what surprised us most, was the belief of the merchant in the opinion too, which he assured us was universal, and "more especially," he said, "among our wealthiest people." This is really to be regretted, as it is a piece of sheer nonsense—vulgar ignorance. Some think that the waters of England are better for dyeing than those of the United States, and others think the dyes and drugs are altogether superior. We must spoil all such "far off fowls with feathers fair." The majority of the dyers in the United States are Englishmen or Scotchmen, the stuffs used in both countries are the same kind, and the waters are the same in both countries. There are good and bad in every land. The colors of the American carpets are as good as the English and the workmanship of the carpets not inferior. Those who have paid a high price for an English carpet, in order to get better colors, have made nothing more by the choice than the simple one of "a bad bargain" through ignorance; and those who have purchased American carpets for a lower price, can laugh at their more unfortunate neighbors and gingle a few of the saved gold dollars as a chorus both for the honor of their country and extra ballast to their purses.

Simpson's Propeller.

A correspondent writing to us enquires what we know about Simpson's mode of propelling vessels, the principle of it, &c., and thinks that the information would be interesting to many of our readers, as a great deal of attention has been directed to this subject. It is our opinion that Simpson's method of steam boat propulsion has not proved to be so good as it was represented to be by the English papers in 1847. None of the new crack British steamships have adopted them. Nevertheless it may do good to describe the principle of the invention. Simpson's propellers consisted of wheels acting horizontally in a case under water. The principle of the invention consists in the ejection of a column of water in a parallel line with that of a vessel's motion acting against the water outside the vessel. Simpson's theory is, that as the wings of a bird act upon the air, which is beaten back

as the bird flies onward, so the submerged water columns act as powerful water wings, beating back the denser mass of water with irresistible force. The invention and principle of it is at least beautiful, none can deny this. In our opinion it is superior, because more natural than the screw. It was tested in 1847 on a small steamboat, the Albion, of 20 horse power, and made 12 knots per hour. The diameter of the wheels was only 24 inches. This certainly was a great triumph, but since that time we have heard no more of it.

Scientific Memoranda.

The ship Portsmouth, just arrived at Warren, R. I. from a whaling cruise, reports that on the 18th of March, in lat. 57 S. long. 74 W. she experienced a severe gale. While scudding before it, a dense cloud gathered in the west, out of which issued a violent hurricane and many balls of fire. One of these struck cutting the pendants at the mainmast head, and fell in fragments on the deck, setting fire to the mainmast head and rigging, and doing other damage.

Lemons may be kept perfectly fresh for three months in summer by placing them in a closely covered jar, or pot, kept in an ice house. Each lemon is wrapped up in paper, but opened and wiped once in ten or twelve days, then covered again with dry paper, and put back into the jar, or earthen vessel, on the ice.

Mr. J. W. Chapman of Washington, Ia., has made some valuable improvements in vertical tube boilers, whereby a great saving of fuel is effected.

A race recently came off on the river Tyne England, between a Gutta Percha skiff 26 feet long and 3 broad, and one crack boat named the Percy. The result was a complete defeat of old wooden walls.

Capt. Bennett, of New York, is doing wonders on the western waters in raising sunken steamers by means of wreck pumps. He has just raised the Highland Mary, which was badly sunk and abandoned.

The foreman of the machine-shop of the Harlem Company in this city, has made a great improvement in oil boxes, by which the cars have been run 3,500 miles during 22 days with a consumption of only half a pint of oil to each box.

Clay, ashes, decomposed or rotten manure, with clover, it is said, has proved to be the best means of improving sandy plain lands.—Plaster is useful in situations where it will act. This can be ascertained by trial.

Dissolving Bones by Steam.

A statement has lately been made to the Highland Agricultural Society, North Britain, in relation to pulverizing bones by steam. It was stated that bones of any size could be reduced to a soft mass by this agency alone. A small boiler, with a steaming vessel connected with it, capable of standing a pressure of twenty-five or thirty pounds to the square inch, was all that was required. If the vessel was filled with bones, and subjected to the action of steam above the level of the boiler (as they will not dissolve if covered with water,) at twenty-five pounds pressure for a few hours, they will become quite dissolved—thus saving all the expense of grinding, and the sulphuric acid commonly used, which amounted to double the price of the rough bones. All the bones were so much softened, that the largest pieces found could be easily crushed fine by the pressure of the hand. Dr. Anderson, the chemist of the society, thought, the steaming would be cheaper than grinding.—Professor Traill thought the steamed bones would be preferable to these dissolved with sulphuric acid, because, when the acid was added to bones, there was a destruction, in part at least, of the animal matter. The gelatine, which was of itself a valuable manure would be saved by the steaming process.

Ancient Pyramid of Balls.

While Mr. S. Blanchard, of Prospect, near Belfast, Me., was looking a short time ago for some stone of a peculiar shape at low water mark on Sandy Point, he discovered thirty six cannon balls from ten to 24 lb., lying buried beneath the surface, covered with a sort of cement, and stacked in a perfect pyramid form.

Potatoe Sugar.

The manufacture of sugar from fecula by sulphuric acid has been carried to a great extent in France. The way this is done is by large leaden boilers, one ton of water being first heated to the boiling point and 22 pounds of sulphuric acid at 60° diluted with twice its weight of water, is added to it. The vessel is provided with a wooden cover, coated with copper, which has near the rim an opening of about 12 inches in width to allow the liquor to be stirred with a wooden rod. After the liquor begins to boil about eight hundred weight of starch flour is gradually sifted into it, which must be continually stirred and added in very small quantities to prevent the formation of lumps, and the boiling is uniformly continued.

In some factories the starch is first mixed with water and placed in a vessel above the water and made to flow into the boiling acid in the boiler in a uniform stream by a tube. This is allowed to be the best way. The boiling is not continued for more than about fifteen minutes after all the starch is mingled in the boiler. The fire is then regulated so that the liquor ceases to boil, or if the boiling is done by steam, which is the best way, the steam is shut off or the quantity regulated at pleasure. About 22 pounds of chalk is then added, or such a quantity as to neutralize the free acid, which can easily be known by the introduction of a piece of litmus paper. The chalk must be added very slowly, on account of the violent evolution of the carbonic acid, which is set free by the new combination which produces the sulphate of lime. The liquor is then strained through coarsely pulverized burned bones which is spread on straining cloths in wooden filtering frames.—The sulphate of lime which is deposited is finally used as a manure, it being first washed with water, and the water may be afterwards used for another process. The filtered liquor is gradually brought into flat pans and evaporated rapidly until it is reduced to about half the volume, when it is a second time heated to boiling with charcoal and bullock's blood, then refined and filtered. 100 parts of dry starch yields about 100 parts of sugar, which is obtained by concentrating the syrup to 36° Reaumur, and decanting it into casks provided with taps, when it is left slowly to cool. At the end of two days crystallized sugar is found in the casks and some liquid syrup, which is drawn off by the tap or faucet. In some factories the syrup is more concentrated and then drawn off into tinned copper vessels. This way does not form such regular crystals as if the syrup was weaker. This every chemist will fully understand. Here we have chemistry systematized into a regular manufacture of making sugar from potatoe starch, sulphuric acid, water and chalk.—These are some of the wonders of improvements in science. The starch sugar syrup is used extensively in Burgundy for giving more body, as it is called, to the wine. It is also used for making better spirits than the kind made direct from the fermented potatoe. Ten pounds of this starch syrup is generally mixed in a 50 gallon wine cask. This sugar is also used for confectionary and a number of other purposes. We hope that none of our readers will be so afraid of sulphuric acid after this, although they may well ponder on the change produced by its action. Flour has but little taste of itself, and the acid is most biting sour, yet what have we as a produce of the mixture? A most charming sweet.—Well may we say, "out of the sour cometh forth sweetness."

The charcoal porters and venders of London have entirely escaped the Cholera. Charcoal is an absorbent of various impurities, and a powerful antiseptic.

Our London Patrons.

We are happy in being able to inform our English patrons that such arrangements have been completed with the London Patent Office that the Scientific American may hereafter be found there. Messrs. Barlow & Payne are agents at 89 Chancery Lane, and will receive remittances on account of the Scientific American from those who may desire to subscribe.

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