

## SCIENTIFIC MUSEUM.

## Dust and Consumption.

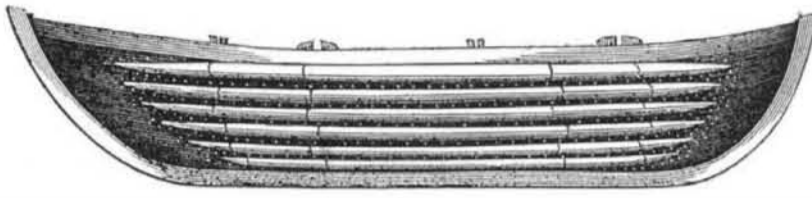
The number of deaths every week in New York City by consumption, is greater than by any other disease. People are exceedingly frightened about small-pox and fever, but neither of these diseases is so destructive of life as consumption, especially in our cities. What is the reason that this disease is so prevalent? Is it caused by evil habits, or climate? Many reasons might be adduced to show that this disease, in many of our cities, is produced by a variety of causes, some of which, if removed, would render it less prevalent. A changeable wet climate is the one where this disease prevails, but if to sudden heats, excessive colds, and much rain, there are impurities in the atmosphere such as smoke, dust, &c., or a want of good ventilation, then other fruitful sources of ill health are added to the climate, as the causes which produce this disease. In New York city the excessive amount of dust which is found everywhere, in dry breezy weather, is perhaps one of the prolific causes of this disease. In a dry climate and a clear atmosphere, it is unknown, but alas for those who are predisposed to it, no such a climate nor atmosphere are to be found here, and from the gross negligence and miserable mismanagement of the government of New York City, the principal streets are the dirtiest in Christendom, hence when no shower visits them for two or three days, clouds of dust roll along with every passing breeze, and every person who from business is compelled to tread our thoroughfares, soon becomes as dark in the face as an Arab. During the past week every pedestrian found in our streets resembled a professor of chimney sweeping, and all owing to our dirty streets. It is a hard lot to snuff and inhale the very dust on which we tread, but in New York we must do it not infrequently. Physicians have observed that the prevalence of consumption in many cities is caused by inhaling dust into the lungs. All persons who have weak lungs should avoid cities, especially dusty ones. It is a shame for a city like New York to be afflicted by its own internal mismanagement with the evils of the Sahara Desert. With such an abundance of water as it has, its streets can be kept clean at all times. It is one of the most insane, shameful, and disgraceful facts connected with New York city, that its streets are kept in such a filthy condition. Strangers from all parts of the world notice this, and pay us compliments for it, but of such a kind as to make us hang our heads. Our people laugh and look to the city government for the remedy; they think that when they elect a man to fill the Office of Street Commissioner, they have done their duty, and all blame is rolled off their consciences. This is a sad evidence of incorrect views of duty; the people and the people alone are to blame for every evil that exists in our city. They elect or appoint men to do certain duties, they are their servants, and for the acts of their servants they are responsible, and for their evil consequences, they themselves are to blame. The cause of so much mismanagement and evil conduct in public officers, is a want of correct and conscientious views of duty among our citizens, especially the intelligent portion of them.

## Monument to De Witt Clinton.

Mr. Henry K. Browne, of Brooklyn, has executed, in bronze, a colossal statue of Clinton. The costume is that of a gentleman fifty years ago. The pedestal, which is about as high as the statue itself, is also of bronze. Its cornices are adorned with vines and oak leaves. The two principal sides are covered with bas-reliefs. One of them represents a canal at its commencement; laborers are busy with pickaxes and spades; horses with carts and men with barrows convey away the earth; engineers are taking estimates of the work. On the other side we find the canal in full operation. It is proposed to make application to the Legislature to authorize its erection in the Capitol Park at Albany. The cost is estimated at about \$20,000.

## Iron Tubular Safety Boat.

We give this week an engraving of a new description of Life Boat, the invention of a Mr. Taylor, of England, and which is taken from the "London Expositor." It is called a tubular safety boat, and consists of a number of iron tubes placed in regular order, as shown in the engraving. Mr. Taylor says that he is more an imitator of nature than an inventor, and that his idea regarding tubular power was borrowed from the strength of a quill, the strongest combination of matter for its weight in nature. Another idea connected with his invention was copied from the construction of the Nautilus, which virtually uses tubes to rise or sink in the water, as may be



be replaced with salt water, so as to preserve the weight carried by the vessel. The second consists of the facility afforded for extinguishing fires at sea—especially such fires as originate spontaneously in cargoes—for internal cocks or plugs could be affixed to the tubes, in order to secure both these objects. The invention is also applicable to the construction of mail boxes and other articles of nautical furniture, in order that if thrown overboard they may float securely and their contents be preserved. The only question of doubt as to the advantages of this mode of

## How to take Care of a Watch.

A watch must be carefully attended to. It should be wound up every morning or evening (perhaps evening is the best time) about the same hour. The key should be in good condition, and fit well to the arbor. If it is too large and has a steel point, it will soon wear off the corners of the arbor, and then it cannot be wound up at all. It should also be wound not too fast nor slow. There are more mainsprings and chains broken through a jerk in winding, than from any other cause. As all metals contract and expand by heat, it must be manifest that to keep the watch as nearly as possible at one temperature, is a necessary piece of attention. Keep the watch as constantly as possible in one position—that is, if it hangs by day, let it hang by night against something soft. The hands of a chronometer or duplex watch should never be set backwards—in other watches this is of no consequence. The glass should never be opened in watches that set and regulate at the back. On regulating a watch, should it be fast, move the regulator a trifle towards the slow, and if going slow, do the reverse. You cannot move the regulator too slightly or too gently at a time, and the only inconvenience is, that you may have to perform the duty more than once.

Never keep a poor watch; that is one with poorly finished works, which cannot under any circumstances keep good time. No person should keep a watch on which he cannot rely for accuracy; a good watch is a faithful mentor, a poor one is like a false companion. It makes no matter whether the case of a watch be gold or silver, if the works are well executed and arranged, it is a good watch. Appearances in watches are as deceitful as the dress of individuals; the character cannot be discovered by the outward appearance.—One word more. Let none of our young or old friends who may come from the country this summer to visit New York City and the Crystal Palace, buy a watch at any auction he may see going on in any street, however respectable in appearance the shop may be; if he does, he will have to pay for a gilt instead of a gold one; in such cases the price paid is always too dear for the lesson taught.

## Price of Wool.

The "Buffalo Commercial" is informed that about two-thirds of the wool-clip of Knox Co., Ohio, has been sold on the sheep's backs, at prices ranging from 42 to 62 cents, averaging about 50 cents. One party bought 180,000 lbs. at an early period, at an average of 44 or 45 cents. Afterwards some 70,000

desired. The inventor does not, however, limit its employment to the above purpose, but applies the principle to the construction of large vessels, by which the cost of loading and unloading ballast would be obviated. He recommends vessels to take in water for ballast, which can be done at any port, by the use of the pumps for a short time, and it can be discharged entirely or in part by merely opening a plug attached to each tube.

Two important objects are likely to be served by the invention, if it be extensively applied. The first is a saving in the stowage of water for emigrant ships, the tubes could be filled so far as might be necessary with fresh water, which could, if that were also required,

construction, is respecting its efficiency for sailing; for a safety boat it appears to be well suited, combining strength with buoyancy, but in its applicability of form to sailing vessels, we have not so much faith. It would however be a great advantage, particularly for emigrant ships, if no material objections could be urged against it, nor are there any that we know of except the very important one with regard to the sailing qualities, which, we conjecture, would be found inferior to those of our present build of ships, constructed as they are upon certain principles.

## Railway Curves.

The "Charleston Mercury" has some excellent remarks about railway curves, and points out the danger and absurdity of constructing so many curves upon some railroads. It says:—

"In the low and middle country of the South these mischievous meanderings of railroads are quite inexcusable. They are never necessary, and in their effects, they form one of the most fruitful sources of expense in the working of the roads. They lengthen the running distance, and thus cause a loss of time to every train. They increase this loss by checking speed. The curved track wears out much faster, and it tears and wrenches the rolling stock. Add to this that every abrupt curve, by concealing the track, becomes a trap for the trains, and will, in all probability, in the ordinary period of a charter, cost the company three times as much in repairs and accidents, as was saved in the first construction.

We have felt that, at this time, when so many railroads are in progress in our own and the neighboring States, this point could not be too strongly pressed on the attention of their managers. Railroads are not temporary expedients—they are meant for the use of all future generations, and are expected to be the most enduring, as well as the grandest monuments of the enterprise and forecast of our age. Let them be built in a manner worthy of their destined office, as the great arterial system of the industrial world,—the bond of union, and the beneficent minister to the wants of the races of men."

These remarks we hope will not be lost upon our Southern and Western railroad companies. We have a country in which straight and level railroads can be built at less expense than they can in any other country on the face of this globe. Air lines, level and double track railroads, and no others should be built.

## Chloride of Gold and Common Salt.

This is the article generally sold by dealers for chloride of gold. It is made by adding to the solution of gold in nitro-muriatic acid, a solution of as much, by weight, of common salt as there is of gold, and evaporating. It crystallizes in a bright yellow powder, and is supposed by inexperienced daguerreo-

typists to be of a purer quality, because it has the color of the metal.

## To Prevent Incrustations in Boilers.

Protochloride of tin has been lately proposed for this purpose from the property that it possesses of dissolving the earthy salts that are produced from the evaporation of the water employed in steam boilers. The protochloride of tin when subjected to the influence of water is changed into a soluble acid salt which dissolves the earthy salts. By the addition of about 2 lbs. of protochloride to a cubic yard of water evaporated, the formation of deposits and incrustations in tubular and common boilers is prevented.

Herr Von Parmewitz, the inventor of the process for making wool from pine trees, has recently presented to the King of Prussia specimens of paper made of the same material. Another ingenious individual, at Giersdorf, has also made paper from the red pine, which is so white and good as to be fit for writing or drawing, and needs no sizing because of its resinous quality.

## LITERARY NOTICES.

EXAMINATIONS OF DRUGS AND MEDICINES—This is a very excellent and useful volume, by C. H. Pierce, M. D., of Boston, and just published by H. C. Baird, Philadelphia, some of the articles are furnished by Dr. C. Linck, formerly of the Glessen Laboratory under Liebig, and once Assistant to Prof. Horsford, at Cambridge. It is well known that stringent laws exist against the introduction of foreign drugs, and that there is but little danger (it was once great) of the introduction of adulterated foreign drugs; but just in proportion as the quality of imported foreign drugs have improved the home adulterated drugs have increased, and against these there is no law; it belongs to the several States to make such laws as will prevent the notorious evil of home drug adulteration. This book is exceedingly valuable and necessary at the present time, as it points out the properties of different chemicals, and the means to be employed for testing their qualities.

LITTELL'S LIVING AGE: NEW SERIES—This excellent weekly publication, containing the choicest articles of foreign and home literature, selected from the best magazines and reviews, has commenced a new series, with a great improvement in the quantity of its matter; it is of magazine form, neat for binding, and contains 64 pages of closely printed matter, and this number contains 13 articles of unquestioned merit. We are glad to know that "The Living Age" is increasing in circulation; we hope it will have a large addition of new subscribers; it is worthy of it. All those who have a taste for real literature can appreciate its worth. It is published by Littell & Son, Boston: each number 12cts.

THE ILLUSTRATED MAGAZINE OF ART—A Montgomery, publisher, New York: We cannot withhold the expression of the very high opinion we have formed of this elegant publication, the first four numbers of which have accidentally come under our notice. The literary character of the work is of the very highest order, especially the historical papers which have been thus far of peculiar and marked interest, added to this, and to make it far more interesting, the work is richly embellished with illustrations, done on wood in a style of artistic elegance, never surpassed. We sincerely hope it may meet with success commensurate with its intrinsic worth, as it is a work capable of imparting both pleasure and profit to all.



## Manufacturers and Inventors.

A new Volume of the SCIENTIFIC AMERICAN commences about the middle of September in each year. It is a journal of Scientific, Mechanical, and other improvements; the advocate of industry in all its various branches. It is published weekly in a form suitable for binding, and constitutes, at the end of each year, a splendid volume of over 400 pages, with a copious index, and from five to six hundred original engravings, together with a great amount of practical information concerning the progress of invention and discovery throughout the world.

The Scientific American is the most widely circulated and popular journal of the kind now published. Its Editors, Contributors, and Correspondents are among the ablest practical scientific men in the world.

The Patent Claims are published weekly and are invaluable to Inventors and Patentees.

We particularly warn the public against paying money to Travelling Agents, as we are not in the habit of furnishing certificates of agency to any one.

Letters should be directed (post-paid) to

MUNN & CO.,

128 Fulton street, New York.

## Terms! Terms! Terms!

One copy, for One Year	\$2
" " Six Months	\$1
Five copies, for Six Months	\$4
Ten Copies for Six Months for	\$8
Ten Copies for Twelve Months,	\$15
Fifteen Copies for Twelve Months,	\$22
Twenty Copies for Twelve Months,	\$28

Southern and Western Money taken at par for subscriptions, or Post Office Stamps taken at their full value.