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Scientific American.

In this city proper, where facilities for rapid local travel be constructed in a couple of years, for one or two millions per mile, they contemplate the erection of a monstrous elevated or bridge railway, at a cost of some sixty millions of dollars, the money to be drawn, after the manner of the Ring. from the public treasury. The nuisance of the Greenwich street bridge is thus to be again introduced on a larger scale, and on a more central, and therefore more objectionable line. This new bridge will be some twelve miles long, dividing and would certainly triumph in the end. the city like a wall, greatly interfering with the comfort of citizens resident near its line, and forming an ugly eyesore for everybody. The New York Tribune has published engravings from the drawings of this bridge, showing the style of structure to be erected over the street crossings. It represents a heavy aqueduct-like erection in stone, of medie val architecture, placed like a barrier across Broadway, reminding one of Temple Bar, in London, but more clumsy than the latter. According to the Tribune, there are to be some two hundred of these gloomy bridges, or one over each street crossing. Such is the latest style of New York engineering. It is strictly in character with the operations of the men composing the Ring, who rule New York, and who have, by their wretched management and shameless plunderings of the public treasury, nearly brought the city to financial ruin.

THE ACTION OF TRADES UNIONS IN REGARD TO AP-PRENTICESHIP.

We have never denied that, in the present organization of society, the right, and perhaps even the necessity, exists for those having certain common interests to form associations to protect those interests. We have never questioned the legitimacy of trades unions, as such; though we have denied their right, under any civil code now existing, to dictate to employers any thing except what wages they are willing to work for, and even this right we limit to the making certain wages represent a certain definite amount of work performed, not an indiscriminate per capita, regardless of the varying value of individual service.

The payment of wages by the hour, day, or any stipulated time, we regard as an essentially vicious system, and its existence has placed employers in a relation to the employed which has enabled the latter to fix a very false and unequally

The question of wages-a source of trouble, from the tion with which the trades unions are grappling. Though professing to aim at the permanent elevation of labor, and the final and permanent adjustment of its relations with capita', their efforts are wholly put forth to compel capital to pay the members of these organizations more than they at present receive, or to oppose the working of the laws of supply and demand, as much as may be, to prevent any decrease from present rates.

By this method of procedure, they lose two very important elements of strength, namely, the earnest sympathy of philanoration of the working classes, and the political strength of

If any thing be sought beyond present increase of pay-or what amounts to the same thing, reduced hours of labor policy pursued, than the course these organizations adopt in regard to apprentices. Not one leader among them seems to have either the shrewdness or the courage to think or say, "The more of us there are, the stronger is our organization, the sooner can we control legislation, and secure to workingtheir services as producers entitle them." On the other hand, plastering, shoemaking, horseshoeing, digging, etc. If we prevent the ranks of plasterers, shoemakers, horseshoers, diggers, etc., from filling up or increasing, the present workers in these fields of labor will have the monopoly of the work, and if not able to do it all, why then the law of supply 126 Beekman street, this city, on the 14th inst., adds one and demand will work in our favor; and whenever it works for us we will let it work, without interference." It is "we," "us," and "our" with these trades unions, not "mankind," " iustice," " equality."

to prate of the abolition of warthrough the abolition of fron- our city, close to Fulton market-which attracts thousands

ten or twelve millions of dollars, drawn from the public chest, trolled by trades unions. Every apprentice excluded is a recruit rejected-the strength of the unions will remain only are imperatively needed, instead of encouraging the building about constant, or will reach a point beyond which it cannot by private enterprise of an underground railway, which could increase; while the excluded multiply, and the social forces destined to overthrow the power of these associations accumulate. Unless they adopt a more liberal policy, their fate will be that of the ancient guilds, and a generation or two will witness their decadence, if not their extinction.

> Making the permanent elevation of the producing classes their high aim, they would adopt a principle the vitality of which would lend growth and strength to their organizations

THE FEAR OF CHOLERA.

It is said that a merchant, during one of the former visitations of cholera to this country, having become so unduly alarmed as to flee incontinently into the country, closing his place of business during his absence, a wag placed upon the door of the absentee the following notice:

"Not cholera sick, nor cholera dead; But through the fear of cholera fied. Will soon return, when cholera's over; If from his fright he should recover."

The unreasonable and excessive fear of some people is well ridiculed in the lines above quoted, but such foolish terror differs very widely from the proper caution which should mark the action of public authorities upon the approach of this scourge. Such caution will receive the praise of all intelligent men, for although the nature of the disease is still problematical, and although there are yet wide differences as to its treatment when acquired, there is unanimity of opinion as to the causes which tend to aggrevate and increase the disease, the removal of which surely lessens its mortality.

This country has had a scarce defined fear, that the cholera would reach us ere long, and that the ravages it has made in the east would be transferred to our shores. In England the fear of the disease has assumed definite form. and the municipal officers of most of its cities have taken decided action upon the removal of nuisances and the enforcement of cleanliness. In London, the dustmen have been ordered to remove rubbish and refuse twice each week from every house, and daily to clean out every public dust bin, and cart away its contents. Owners or occupiers of houses allowing stagnant water to remain in water closets, etc., are fined ten dollars for each offence, and penalties are imposed upon all who pursue offensive trades after notice to discon tinue them. It is also made penal to tolerate common nui sances in houses, or to admit into them live hogs, goats, geese, etc., which has been practiced by some of the lower classes. Butchers who sell stale meat, or dealers in fish or fruit who sell damaged or stale articles, are fined one hundred dollars, and the damaged articles are seized and destroyed.

The commissioners instruct and encourage the people in the free use of disinfectants, and warn them against uncleanly habits. Inspectors are constantly on the lookout for violators of health ordinances, and owners and occupants are exhorted to be more than usually vigilant in the care of their buildings.

This does not look like senseless fright. It is evident the health officers of London apprehend the advent of cholera before long, and are anxious to limit its horrors by every means in their power. The season is too far advanced to admit of much danger from cholera in this country during the present autumn and ensuing winter; but unless its progress shall have been stayed, the next summer will be likely to bring it to our shores. Should this occur, it is to be hoped all our cities, New York city in particular, will be better prepared for its reception than it has been during the recent hot weather, when a walk by either of the two great markets was equal in effect upon sensitive stomachs to a full dose of ipecacuanha, and a trip through some of the tenant house districts was enough to make the stoutest stomach rebel.

FEARFUL EXPLOSION OF TORPEDOES .-- CORONER'S VER-DICT.

The explosion of Union torpedoes and other fireworks, at more to the remarkable list of similar destructive accidents for which the present year has been so notorious.

The particulars of the catastrophe are familiar by this time to most of our readers. A wagon standing on one of In view of this action, how vain is it for the Internationale the most frequented portions of one of the busiest streets in

PROGRESS OF UNDERGROUND ROADWAYS.

Another tunnel, at an expense of \$500,000, is to be constructed under the Thames River, at London, from Arthur | operating basis of wages. street, near London Bridge, to St.George's Church, Southwark. The new tunnel is to be made on the same principle as the mutable character of relative values-is the only real quessubway now existing, which extends from Tower Hill, under the Thames, to Southwark. The new tunnel, when complete, will make the third that has been constructed under the Thames. The great double tunnel, of Brunel, now forms part of the London underground railway system.

Several years' experience in London with the various forms of city railways, has conclusively demonstrated that the underground method is by all odds the best for rapid city transit. It affords a safe, quick, and cheap means of communication, unattended by substantial difficulties or objections. The bridge or viaduct plan of placing the track above the thropists and philosophers who desire the permanent amelistreets, is found to be most expensive, besides being cumbersome and obstructive to the public. This plan has been on numbers, which, if unity of action directed by wise counsel trial in New York for the past three years, on a single track | were secured, would soon enable the laboring population to line, three miles in length, extending from Dey street, at the work out for themselves such amelioration. southern end of the city, northerly, through Greenwich street and Ninth avenue, to 32d street. But it has failed as a financial concern, and is shortly to be taken down and sold for old without decrease of wages-never was a blinder, more selfish iron. No greater nuisance was ever inflicted on the town than the erection of this viaduct railway, and everybody will rejoice at its demolition.

Among the special advantages of underground city road ways, it may be observed that they are out of sight, encumber no streets, and their operation is productive of no serious an- men and women that share of the world's goods to which noyance to the public. Instead of encumbering the streets, every such roadway, in fact adds a new street to the city, and their reasoning is this: "The world needs just so much thus increases its area.

The leading engineers, both in Europe and in this country, regard the underground system as far preferable to the bridge system for city purposes, and new underground road ways have been commenced and projected at several points.

In the city of Chicago, two roadways have been already constructed under the Chicago river, and another surveyed. These underground and under-river roads have proved to be of great value to the public, as avenues for communication between the parts of the city separated by the river, over which bridges had been previously used.

At Detroit, a grand railway tunnel is about to be constructed tiers, of the general distribution of property, its equal com- of people daily-was loading with boxes of a firework so lished in the SCIENTIFIC AMERICAN.

At Baltimore, Md., a splendid underground railway is now in process of construction, and is rapidly progressing. This ' nel has an exterior diameter of 30 feet; 400 men are at work. It is to be finished in less than two years.

The latest and most approved engineering methods for city communication are thus being adopted in all directions-except in New York city. In this metropolis, the municipal managers are notorious for their crookedness, and they exhibit a singular perversity and blindness in respect to the engineering plans for rapid city transit.

Instead of building tunnels under the river between Brooklyn and New York, which could be constructed in one or two years for one or two millions each, they are now going on with through or over the strongest obstacle, and the natural order the slow process of erecting a gigantic suspension bridge, will be resumed. requiring ten or twelve years for construction, at a cost of

under the Detroit river, to connect the city with the Canadian mon enjoyment, and all the other grand principles of social dangerous that their use has been prohibited by municipal shore. Illustrations of this tunnel have heretofore been pub- reconstruction which have lately been published to the world law. One box dropped, and instantly wagon, driver, and team as the aim and purpose of this organization!

ble to do so, such are the difficulties which have been created have been selected with more certainty that numbers would railway will form a connecting link between the Baltimore by the organizations in question. The numbers of artizans be killed by such an explosion. The slaughter is all the and Ohio railway and the Philadelphia railway. This tun- in the various trades are daily decreasing. Those who are more harrowing when we remember that it occurred in an excluded come to regard the monopolists of labor with even greater abhorrence than the monopolists of capital; and The use of dangerous fireworks is, of all amusements, the thus, instead of building up the great cause of the emancipa- most senseless and wasteful.

tion of labor, these societies are bending their efforts to the support of an abnormal system of wages, and the defeat of we are safe." Walking along a quiet street, where we should natural commercial laws, the action of which may be stayed, but never can be held in permanent check. Men may perma- liable perhaps, at any moment, to be thrown, mangled and nently stop the flow of a stream, and dry the channel l:elow their dam; but, however small the stream, the natural and gradual accumulation of the waters will ultimately break garded is frightfully appalling.

were not only crushed and mangled, but scarcely a building

Boys who wish to learn trades now find it almost impossi- in the entire block escaped injury. Scarcely could a place occupation that adds nothing to the welfare of mankind.

As one gentleman remarked, "we none of us know when have every reason to suppose we may tread firmly, we are bleeding, into mid air, or crushed beneath the walls of falling buildings. The reckless way in which human life is disre-

One of the proprietors of the establishment in Beekman street was awfully maimed, and has since died. Let the other So in this matter of apprenticeship, as assumed to be con offenders in this horrible affair be caused to feel that public