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Opinions about New Inventions.

We have frequently expressed our decided opinions respecting the inutility and worthlessness of some inventions, and have proved others to be old, when alleged to be new. We are conservatives in regard to what is old and good, and reformers in respect to what is new and good. As the advocates of inventors' rights, we like to say a good word in favor of new and useful improvements, and this very duty compels us to speak as freely against that which is worthless and calculated to deceive the public. There never was a sham invention yet that was not claimed by its advocates, and those interested in it, as "one of the greatest inventions of the age." There are many inventors who make signal failures in the very inventions about which they are most enthusiastic. All inventors make some mistakes—but they are sincere and honest about them, and we know how to speak about and how to feel for them. But we have no sympathy for those speculators on the public, who deal in sham inventions; nay, instead of having any feeling for them, we have always denounced such schemes, and we always will denounce them. It is well known that whenever any one of those speculators is opposed, and the utility of his alleged discovery condemned, he always flies for relief to some great inventor or discoverer. He will say, "oh, Galileo was persecuted, Robert Fulton was laughed at, and Professor Morse was ridiculed;" he at once claims a martyr relationship to the "mighty dead and living," and be his invention ever so worthless, he never fails to make an impression, and sometimes a very strong one, in his favor, by such an appeal. We heard such an appeal made in favor of the celebrated "new invention" now before our citizens to prevent fires. The object of the invention is a very laudable one, and an invention to accomplish such an object is certainly a very desirable one. It is true that many excellent inventions have been sneered at, and their inventors looked upon as crazy enthusiasts, and there is, perhaps a kind of general tendency in the public mind to look with suspicion upon every new invention. There are reasons for this feeling; if all the inventions which have been brought before the public, and alleged to be new and good, had proved to be exactly as they were represented, there would be no want of public confidence in the success of a new invention. Great discoveries and inventions are desirable, they are welcomed by all intelligent men, as boons to humanity; but the public must be greatly excused for general incredulity about their utility, because so many worthless things have been, and are being continually thrust into public notice, for the mere purposes of gain. There are but few among the great mass who can judge correctly respecting even the apparent worth of an invention, and there are fewer still who are versed in the long history of inventions, so as to judge correctly about the novelty or age of an invention alleged to be new. It is because so many have been deceived by worthless inventions, and by things said to have been new, which have turned out to be old, that many really good inventions have been, for a long time, lightly esteemed, and have had hard battles with inferior but older inventions. Every sham invention, therefore, is a curse to the honest inventor; it is a fortress the shot from whose batteries tells deadliest against his interests and the progress of useful discovery, while, at the same time his banner is waving over its walls.

It is absurd to suppose that the public has any natural feeling against new inventions; it is not so. We have seen the Tabernacle in this city crowded to see the model of a balloon sail slowly through its lofty arch, and hear a lecture upon its qualities, in which it was asserted that it was capable of carrying forty passengers, in three days, from New York to California. Passages were taken out for San Francisco, and when an ex-Governor of Liberia attempted to give some reasons against its practicability, he was hissed down by the united assembly. All believed in the possibility of

the project. Safe aerial navigation is a desirable art, and every one would be glad to see it successfully accomplished, and it is unreasonable to suppose that there is any natural opposition to any other desirable and good invention; but it is not reasonable to suppose that those who are once deceived by an alleged invention, are made skeptics in a great measure respecting others. It is so; and in view of this fact, we have a duty to perform to true and honest inventors and to the public, in expressing our opinions about inventions brought before the community; our object is to do good, and whatever our opinions may have been, this honest conviction has dictated them all, and ever will.

There are but few great and prominent inventions—inventions, we mean, which stand as the head of a class, such as the "Steam Engine," and "The Telegraph." The very great majority of inventions are improvements, and these are innumerable. From week to week they are going on, and improvement is added to improvement. We notice these improvements, for well we know that some things, supposed to be small, and appearing to be small improvements, involve great and important results. The great improvements in steam engines made by James Watt, were simply making the vacuum chamber a separate one from the cylinder, and working the steam on both sides of the piston. It has been the same with other inventions and improvements, and it always will be so. It is wrong to express a wanton opinion about any invention, and it is equally wrong, when able, not to express any opinion at all.

Coffee—Its Nature, Consumption, and Uses.

The coffee plant is a native of Yemen, in Arabia; the time of its introduction into Europe is unknown; it is mentioned in a work, published in 1573, by a German physician named L. Rauwolf. The Turks have Coffee Houses, in which they meet to sip their brown liquid, and chat together, like Englishmen in their ale houses. Coffee houses are common in Germany, and were, at one time, more common in England than at the present moment. The first Coffee House opened in London was by a merchant of Turkey, named Edwards; this was in 1652. Coffee was in public use before that time in France.

When coffee was first introduced into Britain it met with the most furious opposition from old and young, grave and gay, men and women fair. In 1674 the women of England petitioned Parliament against allowing the use of coffee, in which petition it was stated "that men, by its use, became like the desert of Arabia, and that if its use was persisted in, the offspring of mighty Anglo Saxon ancestors would dwindle into a succession of apes and pigmies; and on a domestic message, a husband would stop by the way to drink a couple of cups of coffee." Here we see the fair sex were jealous for the honor of good old English ale; and the question is, were they not right. Coffee, however, had and still has its advocates; it has been stated by them, that wherever it has been introduced, drunkenness has become less frequent, and the people more sober. We have no statistics to prove or disprove this statement, but it may justly be assumed to be true.

In the reign of Charles II., Coffee Houses were shut up in London by proclamation, in which it was stated, "the retailing of coffee nourished sedition, spread lies, scandalized great men, and might be considered a common nuisance." This arbitrary act occasioned violent discontent, and permission was given to open the Coffee Houses again, but the landlords were forbid to keep seditious papers on their premises. The Coffee Houses had become political club houses.

Four different kinds of coffee are used,—Mocha, which is the best, comes down the Persian Gulf, from Arabia; its berries are of a middling size, clean and plump, and of a greenish light olive hue; it sells dearer than any other. The next best is Java, which is grown in the Island of that name, and is cultivated by the Dutch. The other two kinds are the Brazilian and West India coffee, which are very similar. A field of coffee in full bloom is a sight worth going to Jamaica to see.

The quality and effects of coffee differ according to the manner in which it is roasted.

It must be roasted with great care, and not over-done. The Turks roast it in an iron spoon, and roast it just before they are going to use it. This is the best plan, as coffee loses its flavor if exposed after being roasted. The reason of this is evident; the roasting brings out the essential oil to the surface, this is volatile, and is the fine aromatic quality of the bean; it therefore soon evaporates when exposed to the atmosphere. To roast coffee aright it should be done by an invention patented a few years ago in England, it consists in using a copper drum silverized inside, into which are placed the beans, and the drum made to revolve above the fire, until the beans are done. It is best not to over-roast them.

The peculiar principle of coffee is the *caffein*, which was discovered by Robiquet in 1821; it is a very active principle, and affects the urinary organs. Water saturated with coffee was first used by Grindal, in the Russian Hospital of Dorpat, in the treatment of intermittent fevers; it was also given as a powder, raw. In eighty cases, not one resisted its effects. Homopathic practitioners also use it with success.

As an article of diet, and as a beverage, coffee has become quite a favorite, if we may judge from the quantity consumed. No less than 144,986,895 pounds were imported into the United States in 1850; the value of this was \$11,215,099. No country in the world consumes so much coffee in proportion to its inhabitants, as ours. Thus, last year, the average amount of coffee consumed by each man, woman, and child, was over seven pounds. The consumption of coffee has greatly increased in England, and it does not appear that the fears of the old English matrons, about their sons becoming monkeys by its use, are yet realized.

Coffee is now very generally used by all Europeans as well as the old Turks, and in almost all American families, for a breakfast beverage. Its effects upon the human system may be peculiar, but general use has not yet developed anything extraordinary produced by it, except it may be the healthy appearance and rugged strength of some French miners, who use it in large quantities; this fact was brought before the Academy of Sciences in Paris last year. In some armies and navies, coffee has wisely been substituted for grog; it would be well if this were the case in every single instance. In cold weather coffee is an agreeable and safe stimulant. It was noticed that those French soldiers who had saved some coffee and sugar during the terrible retreat from Moscow, stood the cold much better than those who had none. Coffee affects the nerves of some people in a most singular manner, by making them trembling and feverish. No person so affected should use it. As a general thing, for almost every person, we believe it is a healthy and pleasant beverage. In England all the coffee is adulterated with yellow dock-root, ground up along with the beans; the law allows of this adulteration, and yet, for all this, the coffee there sells for about double the price it does in the United States.

Every family should buy their own beans and roast and grind them, for much of our ground coffee is also adulterated with roasted corn and peas. These adulterations are not the least unhealthy, but there is no earthly use of anybody paying for corn instead of coffee, and if anybody wishes to adulterate their own coffee, why they can do it to suit themselves.

When we reflect upon the great quantity of coffee now consumed by us every year, how that the consumption has increased from a little over four million of pounds, in 1790, to over one hundred and forty-four million of pounds, in 1850, we cannot shut our eyes to the seeming necessity of growing coffee for ourselves.

Our Southern States can surely raise good coffee; they beat the world for cotton and rice, both of which were introduced from foreign countries, and coffee, we think, can be as successfully cultivated as these have been.

Long Island Cotton.

Some cotton equal to Sea Island has been raised on Long Island, by Mr. A. P. Ricker, of Newtown, and it is believed that it can be made a profitable crop by a little attention. Tobacco has also been raised on the island with satisfactory results. Mr. R. intends in

another season, we understand, to make quite a crop of cotton and tobacco.

American Pins.

There is a very pleasing article in the last number of "Hunt's Merchants' Magazine," respecting the manufacture of pins in the United States. To America belongs the credit of having invented the first pin machine; it was invented by Moses L. Morse, of Boston, during the war of 1812, but it never was used in manufacturing, as it was too delicate. Mr. Lemuel Wright, of Massachusetts, was the first person who invented a machine to make solid-headed pins. All the old pins were made with heads separate from the shanks; and, indeed, they were in general use in America—all imported—until a few years ago. As pins were so dear during the last war, some pin manufacturers came out from England and set up the business in this city, but after the war they failed in business, as pins could be imported much cheaper than they could make them. Mr. Samuel Slocum, of Rhode Island, commenced the manufacture of solid-headed pins at Poughkeepsie, N. Y., in 1838. He took out a patent in England, but none in America; he used his machine secretly. In 1840 Mr. John J. Howe took out a patent (United States) for making solid-headed pins, and it is now in use by the Howe and American Pin Company. There are three American patents in existence for improvements on machines for making solid-headed pins: one is Slocum's, the other Fowler's, the next Howe's; they are all owned by one company in Waterbury, Conn. The pins made are much cheaper than the imported kind, which were in common use a few years ago. Some pins are still made at Poughkeepsie, but the Company at Waterbury make nearly all the pins used in our country. Both companies make their own wire. We have heard Englishmen say that our American pins are well formed and finished, but they are not tempered like the wire of the English pins, hence they are not so strong, and more easily twisted. The general run of our pins, in common use, we think inferior to the kind we sometimes see here, named "London Mixed;" but then our pins are much cheaper.

Danger of Factories by Fire.

On Wednesday evening last week, an extensive Cotton Factory, on Nixon and Hamilton streets, near Fairmont, Philadelphia, was destroyed by fire. The hands were at work in the upper stories when the fire broke out below, and several lives have been lost—mostly females. Six bodies are reported to have been already found—so charred that they cannot be recognized. One man jumped from the fourth story window and was killed. The loss is about \$40,000, partly covered by insurance.

This great loss of life was owing, no doubt, to the bad arrangement of the stairs, which lead from one story to another. We have known of quite a number of such accidents from the reprehensible arrangement of the outlets from the different flats in factories. There should always be an outside flight of stone or iron stairs, at each end of a large factory, from top to bottom. None but one flight may be used daily, but for emergencies of fire, two should be built when the factory is put up. The poor beings who perished amid the flames, in this factory, were cut off by the flames below, from finding their way out. Isolated stairs walled up from the rooms would allow free exit in all cases of fire. The great majority of our stairs in cotton factories are made of wood and not walled up between the carding, spinning, or weaving rooms. In the course of time, owing to the great quantity of oil used in factories, the stairs become as combustible as pitch pine. In the course of five minutes, if a fire broke out in the lower flat, the stairs would be burned down, and all escape from the upper stories cut off. This, by all accounts, appears to have been the case with the factory in Philadelphia. About 21 years ago, a similar scene was enacted at Johnstone, Scotland. Two years ago, a like one in a factory near Manchester, England. We should have factory inspectors as well as boiler inspectors, for we know some factories that from top to bottom, are no better than match boxes. We hope the above will be thoroughly investigated.