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Wine Adulteration.

In our last number we promised to say something further on this interesting subject, and in doing so we shall call attention to one of the most remarkable pieces of impudence that has, for some time, fallen to our lot to chronicle. When we take wine with a friend, or buy it for our own use, we do so having an honest faith that it is pure; and we should little suspect that any one would purposely attempt to deceive us, by giving or selling us that which they knew to be bad liquor; yet we shall be obliged to doubt every wine, now that, (as many of our readers have doubtless seen,) a chemist advertises in the daily papers of this city, his "flavorings to produce, at a moment's notice, any desired liquor." We are told that great improvements have lately been made in this branch of business, *i. e.*, adulteration; and in consequence, we can purchase of the aforesaid chemist a gallon or more of the *essence* or *oil* of any desired liquor, and by merely adding one barrel of pure spirits, the liquor will be manufactured, "fairly comparing with the best brands." Brandy of "four times the value of the original cost" can be thus artificially made; and lastly, an oil for producing Catawba brandy is sold at a moderate price. These substances are all made and sold in New York, and no doubt, large quantities are consumed all over the country, the consumers imagining that they are drinking a genuine article.

This craving for foreign flavor and foreign names has in a great measure ruined the American wines as *American*, for, says a writer in Hunt's *Merchants' Magazine*, "a great evil in the manufacture of American wine consists in the endeavor to imitate foreign varieties—*adulterations and all*; and it is owing to this that we have no American wine." It is asserted that there is not a self-supporting vineyard in the United States, except the one producing Catawba; and with the exception of one or two in California, not a *fair* sample of American wine. The sparkling Catawba of 1848 was a peculiar wine, having a flavor that has never been imitated, and which had not been before known; but that is now scarce, and many inferior and adulterated varieties are passed upon the unwary for the genuine article. The only and perfect way to discourage adulteration is to patronize and encourage home-grown wines, and accept them as such. It is very probable that, at the onset, they may be a little more expensive; but if, by paying a little more, we can get a pure article, it is well worth the extra expense.

We are afraid that if a commission was appointed to examine the liquors retailed over bars in this city alone, they would find very few quite pure. In gin would be discovered turpentine and peppermint; in brandy, burnt sugar of the worst description, and bad spirits; whiskey would contain camphene; port wine, infusion of logwood; sherry, adulterated spirits called brandy, and other mixtures; champagne would prove old gooseberry; and claret would be difficult to examine, so multifarious would its ingredients be found. Without going any further than our own office, patents have been taken out through the Scientific American Agency for making champagne from cider, by impregnating it with carbonic acid; and we understand that the business is not only a successful but a large one. Another, for giving to wines and spirits, by artificial means, in six months, that age and maturity which, in a natural way, many years could only bring. In fact, it is impossible to enumerate the impositions that are practised, and it is high time that some examination of the purity of eatables and drinkables was made by the authorities of every city. There is no doubt that a board of examiners, chemists, microscopists, and others, having power to purchase, examine, and condemn all articles unfit for human consumption, would tend to increase the health of our cities and the honesty of dealers. Such a tribunal must some day be appointed, and the sooner the better, say we.

The Commissioner's Report.—How it takes.

The First Annual Report of Commissioner Holt, as it appeared in the SCIENTIFIC AMERICAN, three weeks since, has gained for him an unusual degree of approbation from inventors and patentees generally; and with but a single exception, it has received unqualified praise from the press. The exception referred to was an ill-mannered, ignorant, personal assault, in the shape of a communication through the columns of one of our daily papers, upon the motives of the Commissioner. We are well satisfied that the editor would never have admitted its publication, had he carefully perused the Commissioner's report. We think we could point out the author without much labored guessing. He had evidently suffered personal inconvenience at the hands of the new Commissioner, who has naturally been desirous to distinguish his friends from his enemies. The criticism was conceived in bad taste, was unfair in every respect, and exhibited a malice characteristic of that opposition which has attempted to lift its puny head above the Commissioner's rightful authority, for the purpose of interposing obstacles to the introduction of a policy more in accordance with the spirit of the law.

As an evidence, showing the good feeling elicited by this report, we would mention the case of an aged inventor, from a neighboring State, who called upon us a few days since, and expressed his warm commendation of the report. He remarked, with much emphasis, that "it was something new for a Commissioner to espouse, and plead so eloquently for, the cause of the inventor;" instancing, at the same time, the repulsive spirit with which he had been received at the Office on some former occasions. He also referred to the fact that he had now in his possession Letters Patent issued in 1807, and signed (as was then customary) by President Jefferson, and others subsequently signed by Madison, Monroe, and Jackson—those venerable worthies of other days. We believe our friend to be one of the oldest living inventors. He began to take out patents under the administration of Jefferson, has done so under nearly every succeeding administration, and, if we mistake not, he has claims now pending before the Patent Office. The commendation of one such inventor will compensate for the sullen growls and feeble kicks of a score of those who find their toes trodden upon and their selfish schemes frustrated by an independent and fearless Commissioner, who is evidently determined to administer the affairs of the Patent Office so as to commend it to the sympathy and favor of all just men.

The Office now occupies a much higher position in public estimation than at any previous period in its history. While other departments of the government appear to be suffering from the fearful pressure of the times, this alone shows signs of healthy progress. Why is this? In solving this query, we need not summon to our aid the Delphian gods, or "the spirits in the vasty deep." Nor need we heed the gloomy forebodings of those whose dirty intrigues have been frustrated. The Commissioner's just and humane policy is vindicating itself, and its fruits form an index finger to a solution of the cause of the present anomalous prosperity of the Patent Office.

American Horse-tamer in London.

The London *Times* graphically describes the triumphs of the famous American horse-tamer M. Rarey, of Groveport, Ohio, who has astonished all the royal family, from Queen Victoria and Prince Albert to the youngest scion, by taming their most fiery Arab steeds, almost at the word of command, and making them as tractable and gentle as lap-dogs. He communicated his secret (for a handsome sum, no doubt,) to Lord Paget and Sir R. Airey, who also performed similar feats.

Burning Fluid Recipe.

"To one gallon of 90 or 95 per cent alcohol, add one quart of refined turpentine or camphene, and half an ounce of pulverized gum camphor, and to the above add four grains of sulphuric ether; shake or stir the whole together, and let it remain from 15 to 18 days, occasionally shaking it to unite the ingredients. Then, if the composition is not transparent, you must add a sufficient quantity of alcohol, to bring it to the natural color of the alcohol before it was mixed; then it is ready for use. Trim your lamps, put your tubes in the lamps well filled with cotton-wicking, and your lamps will burn clear without affecting the wick, and give a brilliant light, free from smoke or smell. The above is called 'Foster's Patent Chemical Burning Composition.'"

A correspondent in Spring Valley, Rockland county, N. Y., sends us the above, stating that it has been sold by an agent to a great number of persons in that section of country, upon the assurance that it is superior for cleanliness, cheapness, and for giving a brilliant light, to all other burning fluids, mixtures or compositions now known; also that "it will not explode if exposed to fire, in any way it may be placed." Our opinion is solicited regarding its explosive character. It is, no doubt, a very good burning fluid, but no better nor cheaper than that made of super-refined turpentine and 95 per cent proof alcohol alone. None of the volatile burning fluids, so called, are explosive in the fluid state, and the agent referred to may have told the truth, but in such a way as to delude the purchasers of his recipe. All volatile fluids are dangerous, because of their liability to assume the gaseous form, mix with the atmosphere, and then become explosive when ignited. The above burning fluid is as dangerous to use as any of the burning fluids which are understood to be explosive, because it is just as volatile.

False Gas Meters.

In a communication to the New York *Daily Times*, Robert Prince, of Brooklyn, N. Y., asserts that all the meters made in this city, for the gas companies, are designedly constructed to indicate a consumption of about fifteen per cent of gas greater than the real amount. Some years since, he became interested with a manufacturer of gas meters, which were made with indexes that truly indicated the amount consumed, but the gas companies would not purchase them, consequently the manufacturer referred to was obliged to give up the business or attach false indexes to his meters; he now works to the order of these companies.

As gas companies provide their own meters, the persons who consume the gas are not able to tell whether they are deceived or not. Mr. Prince recommends that all gas meters be placed under a competent public "Meter Inspector," and that those who use the gas be permitted to purchase stamped meters where they please. He also asserts that no gas company can prosecute for debt, as they cannot prove by law the correctness of any gas bill, and for this reason they never prosecute, but cut off the supply of gas from debtors.

This is a question which deserves to be probed to its very core. If the gas meters are made as alleged by Mr. Prince, of course the public must be greatly wronged by the gas companies.

Artesian Wells in the Desert.

The great desert of Sahara, the terror of travelers, is apparently destined, under modern science, to become inhabited in many parts, and to yield food, not only for the traveler, but the dwellers in many pastural villages. The French have been experimenting in boring for water—artesian wells—in some of the oases, and their efforts have been crowned with success.

The *Moniteur Algerien* gives an interesting account of the newly-bored wells in the province of Constantine. The first well was made in the oasis near Tamerna by a detachment of soldiers, operations having been commenced in May, 1856. In two months they reached a supply of water which boiled up and discharged 1,065 wine gallons per minute. The joy of the Arab natives was unbounded at the news, which spread with unexampled rapidity, and they came from a great distance to witness the miracle. The *marabouts* or priests held a solemn service, and gave it the name of "the well of peace." They thanked the soldiers in the presence of the people, gave them a banquet, and escorted them in procession to the frontier of the oasis.

In another oasis—that of Sidi-Nached—which had been completely ruined by a drought, a well was also bored; and when the soldiers announced the rising of the waters, the natives rushed to it in crowds, plunged into the stream, and mothers bathed their children in it, to obtain a blessing. It has been called "the well of gratitude," and delivers about 1,142 gallons per minute. In another oasis a well has also been bored, which delivers 176 gallons per minute; and here some of the tribes commenced at once to plant date-palm trees, and give up their former nomadic life. In all likelihood these artesian wells will work a social revolution in the manners of the roving children of the desert. Instead of wandering from place to place—oasis to oasis—in search of pasture for their flocks and herds, as their ancestors before them had done for centuries, they will cluster round these fertilizing springs in well-built cots, and exchange the hunter's spear for the plow of the farmer, and thus take steps towards civilization.

Atmospherical Phenomena.

The Hingham (Mass.) *Journal* states that the atmospheric phenomena known by the name of "mirage" was witnessed along the line of sea coast in that region through the whole day of the 1st inst. The mirage is an optical illusion arising from an unequal refraction in the lower strata of the atmosphere, causing remote objects to be seen double, as if reflected in a mirror, or to appear as if suspended in the air. This phenomena was seen by thousands of persons on the coast. Ships were seen sailing in the air, and distant parts of Cape Cod were distinctly visible in the vicinity of Boston; large rocks and islands were clearly painted out upon the clouds, and various other singular appearances were seen.

Artesian Wells.

In another column of this paper may be found the advertisement of T. H. Leavitt, of Boston, for information concerning the boring of artesian wells. Mr. Leavitt has already accumulated a vast amount of information on the subject of deep borings, and in due time he will publish a volume on this topic, if sufficient practical information can be obtained. We are not aware of any good work on artesian wells, and we trust those interested will respond to Mr. Leavitt's call as set forth in his advertisement, so as to enable him to furnish a work on this subject which will be of national benefit.

Baldwin's Water Wheel.

Since publishing an engraving and description of this wheel, we have received testimony from certain reliable parties setting forth its good qualities. From the high source from which the recommendation comes, we feel confidence in commending the Baldwin wheel to any who may desire an economical water power. Mr. Baldwin's advertisement may be found on another page.

REMOVALS.—We understand that Commissioner Holt has made several removals in the Patent Office during the past week. Prominent among those who have been ousted we may name Professor Schaeffer, Chief-Examiner in the Chemical Department.

UP to the time of going to press we have been unable to procure a copy of the new Patent Bill. It is believed to contain very objectionable features, therefore we are anxious to get hold of it.