

Scientific American

NEW YORK, AUGUST 16, 1851.

Mock Auctions and Inventions.

In this city there are a great number of shops in which, day after day, may be heard the voice of the auctioneer "going—going—gone, for only ten dollars—worth thirty," or perhaps a hundred. These places bear the not very beautiful epithet of Peter Funk shops. They are man-traps for strangers; and a short time ago, our Mayor had boys going through the streets carrying placards on which were inscribed "Strangers, Beware of Mock Auctions." These shops look respectable, and there are always a number of persons around the auctioneer, all zealously intent on making money by bidding hard. These men are what are termed "stool pigeons," or decoys to allure the unwary stranger. Many a stranger goes in and bids off a gold watch, or whatever it may be, for fifteen or twenty dollars, vainly imagining he has made a bargain, when in reality the watch is not worth fifty cents.

There are various kinds of these "Peter Funks," (we dislike to use the term, but a sense of duty compels us to do so), but our business is with those who are connected with "pretended inventions and patented improvements." It is quite common for persons to travel round the country selling patent receipts for this, that, and the other thing, deceiving people with the name, *patent*, when they have no patent whatever. It is also not very uncommon to find a lot of men associated together for the purpose of selling out rights of some grand discovery or invention which is to turn the world upside down, and make a fortune to every shareholder in the scheme. The invention is always going to be patented, until the bubble bursts. All such speculating schemes have their "stool pigeons," men of no moral character, but gifted with a prodigious quantity of assurance. Such characters are quite abundant, and in this city, and in others, we suppose, they can be purchased in any quantity for one dollar a-day and roast beef. When detected in their evil practices, and their designs exposed, they are voluminous in bad language and personal abuse; but having no character to lose, respectable people pass them by, rightly judging that sooner or later their evil acts will bring them to punishment. It is the duty of every honest editor to warn the public against pretended, deceptive inventions, whether he may suffer calumny for it or no; he should be armed so strong in honesty as to let all threats and revilings pass him by as the idle wind. This course we have endeavored to pursue, and will always do so, for "honesty is the best policy" after all. We reprobate all such deceptive schemes, and the wicked conduct of all papers and parties engaged in them. They have injured, and do deeply injure, honest and *bona fide* inventors and patentees. So many people have been cheated and deceived by such schemes, that, in some districts, the only way to bring discredit upon a good improvement, (unless the patent seal is there to prove it) is to say it is patented, or, it is a new and great discovery. As the defenders of the rights and titles of true inventors and patentees, we lift our warning voice against all mock patented receipts, &c., and all mock discoveries. We have also a duty to perform to the public respecting such wicked schemes. A great many of the readers of the Scientific American are not inventors nor patentees, but they take an interest in the progress of science and art, and many of them conduct manufacturing operations. We say to them, no patent is granted but for something new, and the inference is that an improvement is embraced, as every application has to be made for "a new and useful improvement;"—grand unpatented discoveries should be looked upon obliquely, and classed with "Mock Auctions."

Dr. Gilbert, of New Orleans, whose success as a curer of cancer we have noticed in the Scientific American, informs us by telegraph that he shall arrive in this city on the 20th of this month.

Short Conversations on Mechanics—No. 2.

Q. "Last week you explained satisfactorily the distinction between statics and dynamics, but in explaining what the science of 'Mechanics' related to, you did not explain what a force was, although you said 'the science treated of the forces by which bodies may be made to act upon one another.' I would like to know what a force is."

A. Of the actual nature of forces we are very ignorant; we know of their existence by the effects they produce; it is, however, the province of the scientific mechanic to know where the forces, with which he has to do, come from or reside—what kind they are—their principles of action, or, as the chemist would say, "how they behave themselves." Whatever tends to change the actual state of a body in respect to rest or motion, is denominated a force in mechanics.

Q. "Well, then, where do the forces come from or reside, with which the engineer or mechanic has to do: I mean the motive forces?"

A. From various sources; but first let me say, there are two forces which cover the whole ground in mechanics: these are attraction and repulsion. The former is exemplified by the attraction of bodies on our globe to its centre, such as a water-fall, and is called gravity; the latter by steam and gunpowder.

Q. "Do these cover the whole ground? Are there no other forces of attraction but gravity, and none others of repulsion but steam and gunpowder?"

A. By no means: magnetism exhibits both attractive and repellant forces, and so does every molecule of matter when considered chemically; but, as I said before, it is rather the province of the mechanic to know what the forces are with which he has to do, &c.—mind the distinction.

Q. "If we are ignorant of the actual nature of force, how can we understand the principles of its action and the laws which govern it?"

A. There is much truth in what you say, and in answering you I will explain the difference between the scientific and unscientific mechanic. We can only gain a knowledge of forces by experiment and observation, and I wish you never to forget the distinction between why a thing does so, and it does so. For example, an electro-magnet attracts a piece of iron and holds it firmly; we know this, but why it does so we cannot tell. We know that heat expands water to about 1800 times its natural bulk, but why it does so, we cannot tell. The difference between an enlightened and an unenlightened man, in respect to these forces, lies in this—an ignorant man, seeing a piece of iron attracted by an electro-magnet, would attribute the phenomena to magic, or perhaps a force inherent in the electro-magnet; whereas the enlightened man knows the magazine of force to be the battery. (This electro-magnet is very different from the load-stone—it is only a piece of soft iron, and exhibits attractive force only while the wire that surrounds it is connected with the battery, by the electric circuit.) And in respect to the steam engine, the first time an ignorant man saw one in motion, he would believe there were some animals cunningly concealed somewhere about it to give the beams and shafts motion; the enlightened man, on the contrary, knows the steam boiler to be the magazine of force, and the steam itself to be the force, and not a spirit, as was supposed by the ignorant Hindu, the first time he saw a steam engine; but no man, however debased with ignorance, if sane, would believe that a walking-beam or wheel could move itself, or generate a force. The mute rocks teach the lowest savage this philosophical truth: he knows that inorganic bodies do not possess a moving or dynamic force in themselves, and cannot, therefore, impart it to others.

Q. "I now understand you; the scientific man, when he sees a machine in motion, knows what gives it motion (the force) and all the known laws which govern it—the ignorant man does not."

A. That is it exactly.

Q. "I should also have known, by the weight and spring of the clock which you explained last week, that no machine had any

inherent force to move itself; but you have now gone a step farther, and I am taught that when I see an inorganic body in motion—any machine, stone or bullet—that it or they have received motion out of themselves."

A. That is it precisely; and I will cite a few axioms for you to store up in your mind,—the bases of all disquisitions on mechanical action. 1st. A body once at rest will remain eternally at rest, unless it be put in motion by some external cause. 2nd. A body once in motion will preserve it eternally in the same direction, and with the same velocity; or will proceed with a uniform motion in a straight line, unless it is disturbed by some external cause. In these two propositions consists the whole science of motion called mechanics.

Q. "I now understand more about the different kinds of forces, their sources, &c., but I should like to know something more about the laws which govern them."

American Wines.

By the Western Horticultural Review, an excellent magazine, published in Cincinnati, we learn that the American Wine Growers Association met there on the 5th of last month, and a committee presented a very excellent report on the "Falsification of Wines." It states that many liquids are brought into market, labelled "pure wine, not adulterated" "not fermented," "ladies' wine," "Victoria wine," &c.; these cannot be called wines, *not having been fermented*. The only means to check fermentation are heat, cold, alcohol, acids, strong alkalis, or caustic earths, or acrid essential oils. The effect of heat or cold is only temporary. One kind, the report says, seemed to have been a liquid boiled down to concentrate the sugar, to which brandy was added. Another, labelled "not adulterated," contained a great quantity of sulphuric acid, and these liquors were dedicated "to ladies." It seems, then, that the labelled "non-adulterated," is generally the very worst adulterated. We must say, however, that it is a compliment to the fair sex, to dedicate it to them, for old birds cannot be cheated with chaff. The most of the wines received in Cincinnati are made of old wine mixed with sugar and brandy. In a medical point of view, the American Catawba wine is to be ranked as the first, with the mild pure spirituous wines to which those of Germany and a part of the French belong. If the Catawba wine is kept for three or four years before it is brought into market, it ranks and compares with any of the European wines.

Braithwaite's Retrospect of Practical Medicine and Surgery.

SCARLET FEVER.—Mr. Daniel Adee, No. 107 Fulton street, this city, has just republished part the twenty-third of this excellent work. It embraces a retrospect of the past six months' practice, from January to July (1851). This is one of the most useful works in the world—it is not only positively essential to every practising physician and surgeon, but to many others besides. Dr. Gardner has a paper in it respecting the treatment of scarlet fever with belladonna, in which he says that he has not yet met with a fatal case in treating with it. He administers the belladonna according to the ability of the patient, in doses of half a grain to a whole grain, every three or four hours. He does not allow delirium to deter him from giving the medicine. The diet he recommends is bread and milk. Dr. Green, of Peckham, England, corroborates this, and says he has used it for ten years successfully. His doses to persons above puberty is one-sixth of a grain in mint water, every four hours; for infants, very minute doses are given, and these with caution. Dr. Bennett, of Gateshead, states that after ammonia, mineral acids, and the application of nitrate of silver had all failed, in treating malignant scarlet fever, he found that one or two table-spoonsful of fresh yeast, frequently given, was quickly efficacious as an antiseptic and stimulant. This work is full of all such practical information.

Bartlett's Elements of Natural Philosophy—Mechanics.

This work is published by A. S. Barnes & Co., John street, this city, and from the fame of the author, and his position, being that of

Professor of Natural and Experimental Philosophy at West Point, its character for completeness and profundity might have been anticipated. We are more than proud of such a work being produced in our country; it is both an honor to its author, his publishers, and our country; and it is a solid acquisition to science. It treats of all the different branches of the mechanics of solids—such as the Forces, Motions, Velocities, &c., illustrating the different problems with figures admirably adapted to present the truths of this science to the mind with perspicuous force. This is the crowning feature of the work. There is as much difference between authors of works on philosophy, as there is between historians:—some are so dull their works cannot be read; others so cloudy they cannot be understood: it is not the case with this work. The mechanical powers, such as the lever, &c., are ably treated, and there is a most excellent chapter for the practical man, on friction bearings and unguents. The "Mechanics of Fluids," Part 2 is an extensive treatise. The egotistical tyros in science who ascribe the action of the syphon to statics, will here find their false philosophy sadly at fault. Hydrodynamics is a difficult subject to treat satisfactorily to the practical man, because we have something yet to learn by experiment and observation. The known and fixed laws of hydrostatics, however, are clearly and ably set forth in this work.

The Alleged New Motive Power.

"The Scientific American and other papers in the city have published an alleged new motive power, with illustrations, attempting to show that centrifugal force may be derived from 'static pressure,' or, in other words, that a sort of perpetual motion may be obtained by a peculiar arrangement of machinery, merely by 'static pressure' being applied to the accumulation of force; which, it is contended, is a principle never before discovered or understood."—N. Y. Farmer and Mechanic.

[The above is untrue in language, and exhibits a dishonest spirit. The Scientific American did the very reverse of what is alleged above against it, as is well known to the F. & M. It pointed out the absurdity of this new alleged power, and demonstrated clearly its defects and how it conflicted with the well-known laws of mechanics. On the 10th of July the Farmer & Mechanic published a communication about this new Motive Power, in which it is stated, "If any one can point out the fallacy hidden in the calculations, he will confer a favor on the supposed inventor by so doing." The F. & M. did not add a word of comment—thus acknowledging that its five Editors and Associate Editors were not qualified to do so. Since we have shown the calculations to be absurdities, all the little dogs, Tray, Blanche, &c., begin to bark.

Patent Case.

In the U. S. Circuit Court, Judge Woodbury Presiding, the jury in the case of Colt vs. Mass. Arms Co., for infringement of a patent, have returned a verdict for the plaintiff, by which the real damages, amounting to about \$5,000, will be settled between the parties hereafter, there being a written agreement between the parties, that the verdict, whichever way it might go, should only be a nominal one.—Worcester Transcript.

[This is for the infringement of Colt's patent for Repeating Fire Arms. We were told that the case had been put off. This case has tested the validity of the patent, and according to rule, we suppose, injunctions will be granted before trial on other complaints.

American and London Hats.

Citizen Genin, the hero of having purchased the high priced ticket at Jenny Lind's first concert, a man of energy, taste and grand impulses, challenges the whole of the hatters in London to produce a specimen of a hat equal to the one he will manufacture. He proposes the decision to be left to an impartial jury and the stakes to be handsome, and devoted to some charitable purpose. We have no doubt but Genin will come off with flying colors, if his challenge is accepted—but we suspect the affair will never come off.