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The Fire Annihilator an Old Invention.

Machines like those now got up for extinguishing fires by the generation of carbonic gas, with water in the inside of them, were invented and tried as far back as 1721, and the whole difference between the said machines and Phillips' Fire Annihilator, consists in the old one having an outer case of wood, while Phillips' is made of iron; this, *essentially* is the whole difference. In 1721, one Zachary Greyl, a German, invented a vessel named "The Water Bomb," for extinguishing fires. The invention is thus described—"A wooden vessel was provided, holding a considerable quantity ot water; in the centre of this there was a fixed case made of plates of iron and filled with gunpowder; from this vessel to the head of the larger vessel, containing the water, there was a tube which might convey the fire very readily through the water to the gun powder in the inner vessel. This tube was filled with a substance easily ignited, and quickly burned away." The manner of using it was to take it to the house on fire, ignite the substance in the tube, and throw it into the building (the same way as is done with Phillips' Fire Annihilator), when the powder in the inner case soon took fire, exploding the vessel and scattering the hot water in all directions, putting out the fire at once." The inventor exhibited his machine in Dresden and Paris, and was successful, in a number of instances, in putting out the fire. In 1823, an English chemist, in London—the place where the new Annihilator was brought out—revamped Greyl's Water Bomb, and made and sold as many of them, for a time, as the modern company in this city have done. One size was for five gallons and another for three; they are now sold by the charges. But this was not the only style of them made by the English chemist, whose name was Godfrey; he had a kind with the powder on the bottom, which carried the water up a chimney on fire, while the tube to ignite it was at the bottom, projecting downwards, and could be ignited with perfect safety. The son of this Godfrey invented a number of balls to extinguish fires, on the principle of his father's application, and on one occasion, by two balls thrown into a house on fire, it was extinguished.

Now the whole difference between the modern one and the old one, is not much, for if an outside case of metal had been used by Greyl, he would have had the modern one exactly, excepting in the use of vitriol to ignite the chlorate of potash, as used by Phillips, and the forcing of the water up by the gas passing through a perforated plate. The grand idea of a Fire Annihilator—the apparatus—belongs to Greyl; of this there is no doubt. And is gunpowder not a generator of carbonic acid gas? Certainly it is. And if gunpowder and salamoniac were used as a substitute for Phillips' gas brick, more gas would be generated; for, assuredly, a great deal of the substance used in Phillips' must pass off in carbonic oxyde—not acid—and therefore produces no effect in extinguishing flames. How Mr. Ewbank could let the modern patent pass with such a clause as this, "applying gases resulting from combustion, by the pressure of their generation," to extinguish fires, is unaccountable to us. The patent was granted in April, 1850, and the Commissioner was not ignorant of the "Water Bomb," as it is described on page 349 of his "Hydraulics." The old Fire Annihilator is public property, and by a little modification could be made better and cheaper than any modern one, using the old wooden outside case; but it never can be a useful substitute for the Fire Engine, although it may answer very well for ships, where no air can get underneath the flame. It will not answer at all when the air has a free circulation below and above, and Phillips' Fire Annihilator will be far less effectual in such cases.

The Late Machinist of the Patent Office.

We have received a note from Mr. A. B. Stoughton, the late able Machinist of the Patent Office, stating that he was not removed by Mr. Ewbank, but voluntarily resigned; it is accompanied with a note of the Commissioner, expressing his regret at Mr. Stoughton's resignation. We were not aware of the reasons which led Mr. Stoughton's place to be supplied by Mr. Bell, who is also represented to be, like Mr. Stoughton, a good and able machinist, and we made no comments on the causes of the change; to have done so would have been imprudent in us.

Great India Rubber Case in Boston.

For years "The Great India Rubber Case" has been a *case* before the people of the Republic, and it has proved one fact to a certainty, viz., that our law courts partake quite as much of the india rubber character as the article in contest between Mr. Goodyear, the plaintiff, and Horace Day, the respondent. India rubber is tough, elastic, and has a wonderful power of stretching itself to the utmost attenuity, then suddenly contracting to its original thickness; it is just the same with our laws; for this case has been before the people from Boston to Jersey, almost from time immemorial, and is still before them,—as near a settlement as it was when first it burst upon our ears with "Great India Rubber Patent Law Case, Goodyear vs. Day." On Tuesday (14th Oct.), last week, in the U. S. Circuit Court Boston, the counsel of the plaintiff (Mr. Goodyear) moved to put off the trial to the 26th day of December next, stating, as a reason, that Hon. Daniel Webster had been retained for the plaintiff, and the 26th day of December would be convenient for Mr. Webster to be present. The counsel for the defendant then moved that the proceedings be stayed in the case until the decision of another case, involving the same subject matter, that is, the validity of the Goodyear patents between the same parties, was pending in the District of New Jersey, which had been prepared at great expense by both parties, and which was put off by the plaintiff at the last September term of the Circuit Court of that State, when the defendant was ready and sought a trial upon the merits of the controversy. The defendant's affidavit was read in support of the motion, in which he claimed that there was an attempt on the part of the plaintiff to take him unprepared and compel him to try the case in Massachusetts, after having procured the case in New Jersey to be continued when it was ready for trial. The defendant asked for time to answer the plaintiff's affidavit, which was granted. Mr. Webster was in court, but unprepared, it seems, for the trial. We hold that a plaintiff should never be allowed to postpone a case: the reason we give is, that he should not bring up the case and put defendant to great expense, when he (plaintiff) is not prepared to go on with the trial. No one knows what advantage a plaintiff has to put a defendant to great expense—wilful and malicious expense—until he examines into such cases. In speaking thus, we make no reference to the principal parties in this case—we speak of principles not individuals. Such a case as this "Great India Rubber Case," we conceive, is a disgrace to our United States Courts: they are to blame for not having the matter settled long ago; law executors, to be respected, should be prompt as well as considerate. It also appears to us that the contending parties in this case have taken up a new system of advertising, for on Thursday, last week, the case was again brought before the court, and the defendant moved a postponement of the trial until next February, which the court took into consideration. Mr. Webster was there, and made a speech full of sarcasm on the defendant for publishing certain advertisements, among which was Mr. Judson's affidavit, pronouncing Goodyear's alleged patent a fraud and swindle. The article in dispute was not a form, but an article for sale, and this was a reason why justice should be rendered as soon as possible—more particularly since advertisements alleging fraud had been and were being circulated, to the detriment of the value of plaintiff's property. Mr. Webster contended that two months was ample time for the defendants to prepare, and that, though his services in the case might not be worth a straw, yet he had other engagements that would prevent his attending to the case after January, and there was no time for his client to employ other counsel in the case.

On Saturday, the 25th, Judge Sprague, in an elaborate address, decided that this suit should await a previous suit in the course of slow progress in the U. S. District Court for New Jersey.

This is truly an india rubber case.

Varieties in Science.

The Cleveland Plaindealer states that a circular has been received from T. A. C. Foreman, of Oquawka, Ill., requesting that every printing office in our country should send him $10, for which contributions he will send to each office such instructions as will enable them to transform common printing presses, having an iron bed or platten into a quick working magnetic press, the expense of change only being about fifty or a hundred dollars. Mr. Foreman claims to be the inventor of a magnetic press. He is perhaps not aware that a paper was printed twelve years ago by a magnetic engine. The expense for working his press would be far more than to work it by steam, of this there is no doubt whatever. Those who differ in opinion from us have but to put up a magnetic press alongside of a steam one, and convince us by facts.

The London correspondent of the Inverness Courier, in the latest issue, thus notices a new process of grinding introduced with success into Great Britain:—

"By the way, talking of meal, and I may include flour, there is a new way of grinding discovered, which seems likely to supersede altogether the modes and machines hitherto used. It consists of upright conically-shaped bruisers, from which the flour or meal escapes below by the force of gravitation, without any other pressure than is necessary to pulverise it. Bakers give evidence as to the great superiority of the article so produced; and a sanguine agricultural writer estimates that by the general adoption throughout Britain, of the conical vertical bruiser, a saving will be effected of more than £2,000,000 sterling per annum."

[The [illegible] stone constructed on the principle of Scheles anti-friction curve. The writer makes a terrible hash of the description.]

M. Vallee, keeper of reptiles at the Garden of Plants, observed on the 14th July last, in the space reserved to turtles, six eggs lying on the sand. He took three of them, and placed them under the hatching apparatus, in which he has effected great improvements. On the 14th of this month, he examined the eggs, and to his astonishment and delight, found a turtle about the size of a walnut. This is the first time, says M. Vallee, since the creation of the world, that a turtle has been hatched by artificial means.

A late English paper says, that a few weeks ago a stone cutter at Dumfries, obtained a large block of red sandstone from the low quarry at Lockarbrigg. While squaring the stone, a loose layer was removed, and on the face of the block thus displayed, a long indention was formed. It proved to be the mark of a human foot, which must have been impressed upon the mass, which in the course of ages afterwards, became petrified into hard and solid stone. At the heel and great toe the depth of the impress was considerable, from three quarters of an inch to an inch, and the whole print of the foot was sharp and distinct.

We however differ in opinion about the impression being made from a human foot.—There are many footmarks on rocks, but such a mark in forming, whatever was the cause of it, merely assumed the form of a man's foot.

Carbonic Acid Gas and Steam to Extinguish Fires.

Messrs. Editors.—In reading your description of the Fire Annihilator, in No. 1, Vol. 7, Scientific American, I find that steam and carbonic acid gas are used, and the patent is only for the mode of generating and applying steam. In 1835 I first applied steam to extinguish fire in the hold of a steamboat; since that time many a boat on the Mississippi has employed a pipe running from the steam boiler to the hold, for the purpose of extinguishing fires, and many fine boats have been saved by this means. I put this attachment to a boat that I was building in Pittsburgh, and was told I was infringing a patent right. I never applied for a patent, and first used it sixteen years ago, and made it a present to the public. Can an action be held against me for infringing a patent right, the invention claimed being precisely the same as mine of 1835, viz., a simple pipe for the admission of steam from the boiler to the hold?

On the 4th of August last, I passed a ship on fire, cotton loaded, at the South-West Pass of the Mississippi; she had two steamboats alongside of her, pumping water into her hold. They had tried to scuttle her, but could not get her to sink. The ship finally burned to the water's edge. Now, instead of pumping water into her, had the two steamers stuck a pipe into the ship's sides, or a wooden box or trough, that could have been made in a short time, and communicating with the safety-valve of the boilers, the hold of the ship could have been filled with steam and the fire extinguished, and the ship and cargo saved.

If I see proper to use carbonic gas, generated in the most simple way, together with steam, to extinguish fire in the hold of my boat, will I be infringing the patent of the English Fire Annihilator? J. E. Haviland.

Galveston, Texas.

[Mr. Haviland is perfectly safe in using his steam and carbonic gas, as long as he does not use the apparatus of Phillips. There is no patent in existence, that we are aware of, for using steam to extinguish fire.—[Ed.

Return of Greenough the Sculptor.

This eminent American artist, has after an absence of nine years in Italy, once more turned towards his native land, and rested his feet upon the soil sacred to his affections. Mr. G. has been engaged during his residence in Italy upon his marble group for the Capitol at Washington. The group is now ready for transportation, and only waits for a national vessel to transport it to this country. The artist has come to receive it and superintend its establishment.

Is it not possible to raise up a school of sculpture in Columbia? We think it may be done.

American Progress.

The following is from the London Observer, and is not a little flattering to our feelings:—

Our cousins across the Atlantic cut many degrees closer to the ground than we do in seeking for markets. Their industrial system, unfettered by ancient usage, and by the pomp and magnificence which our social institutions countenance, is essentially democratic in its tendencies. They produce for the masses, and for a wholesale consumption. There is hardly anything shown by them which is not easily within the reach of the most moderate fortune. No Government of favoritism raises any manufactures to a pre-eminence which secures for it the patronage of the wealthy. Everything is intrusted to the ingenuity of individuals, who look for their reward to public demand alone. With an immense command of raw produce, they do not, like many other countries, skip over the wants of many, and rush to supply the luxuries of the few. On the other hand they have turned their attention eagerly and successfully to machinery as the first stage in their industrial progress.—They seek to supply the shortcomings of their labor market, and to combine utility with cheapness. The most ordinary commodities are not beneath their notice, and even nursery chairs are included in their collection of "notions." They have beaten us in yacht building, they pick our best locks, they show us how to reap corn by machinery, and to make Brussels carpet by the power-loom.—Our coopers will hear with dismay, and our brewers with satisfaction, that by an invention of theirs, recently introduced into the Exhibition, one man can do the work of twenty in stave-making, and far more efficiently.—Such triumphs does not affect, perhaps, the mechanical superiority of the mother country, but they serve to show that while on the one side nations less free and enlightened than ours teach us how to throw a lustre and grace over the peaceful arts, our own children are now and then able to point out how we can improve and extend them.

The Great Exhibition is closed, and the Crystal Palace will soon be numbered with the things that were. An interesting letter from our correspondent will be published in our next.