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Report of the Commissioner of Patents on Goodyear's Extension Case.

We give, on another page of our paper, the able decision of Commissioner Holt in the extension case of Goodyear's india rubber patent. Whatever difference of opinion may exist in the minds of inventors and the public at large as to the justness of the conclusions arrived at, we think that a perusal of this document will convince all, that, Mr. Holt is not only possessed of fine abilities, but also that peculiar appreciation of the interests and worth of inventors which pre-eminently fits him for the responsible office of Commissioner of Patents. Throughout the entire document there is discernible a conscientious desire to arrive at a decision compatible with the facts, and the interests and rights of all concerned, and if an error has been committed at all, it is one of judgment and not of will. In the concluding portion, which we shall give in our next issue, the Commissioner incidentally makes a dignified and manly defense of the rights of inventors; and in dwelling upon the injuries alleged to have been sustained by Goodyear, in common with other inventors, at the early stages of the introduction of his invention, he reaches a degree of eloquence which is alike honorable to his head and heart.

Our original intention was to publish this report in three or four parts, but after carefully examining it, we found that by dividing it into more than two parts its sense would be materially affected in the perusal. We think our readers will agree with us that the general interest attached to this paper fully justifies us in giving it the large space we do.

Accidents—Their Cause and Prevention.

We are no fatalists, and therefore believe that the great majority of the numerous accidents for which our country has such an unenviable reputation, are caused either by recklessness or carelessness. With the greatest amount of care and forethought which erring mortals can exercise, some accidents will, no doubt, occur; but, at the same time, we are confident that nine-tenths of those which have taken place might have been prevented by the adoption of such measures and the employment of such means as the common sense of almost any man might have suggested. For example, on the afternoon of the 21st ult., during a violent gust of wind, a large glass factory at Hunter's Point, near this city, was blown down, and two persons were killed and several wounded by the falling walls. Could this accident have been prevented? It could, easily, by simply making the factory walls thicker when they were erected. The verdict of the Coroner's jury in this case was:—"We unanimously agree that Bernard Slane and Thomas Gill came to their deaths by the falling of the west wing of the building known as the 'American Flint Glass Company Works,' during a violent blow of wind; and that the above-named building was not constructed with sufficient strength for the purpose for which it was used."

The walls of the structure were very thin—far too flimsy, according to the common sense of every man who examined them—and the mortar employed possessed little more adhesiveness than sand and water. It was erected last year by contract, at a very low price, to save money. The material damages by the accident amount to \$10,000, and had four thousand dollars extra been expended at first to erect a more solid structure, six thousand dollars would have been saved, and Mr. B. Slade, the father of the principal proprietor, who was killed, would now probably be in the land of the living. How recklessly "cent wise and dollar foolish" some persons are!

On the 16th ult. a large brick store in Milwaukee, Wis., suddenly fell, and killed five

persons. The crash was not caused by wind or storm, but by the very defective walls, which could not support the weight of goods on their floors, and their weight was not very great. This structure was also built with thin flimsy walls, to save money.

The steamboat *Pennsylvania*, (noticed by us last week,) which exploded her boilers, and killed over two hundred persons, was engineered by careless men, as it is credibly reported that the disaster was occasioned by the want of water in the boilers. We might go on and instance hundreds of such cases, but those related are of recent date, and should be sufficient of themselves to awaken such a humane and intelligent spirit in the community as would lead to an entire reform in the means taken by all our people for the prevention of such shameful and mournful events.

The Patent Office Structure.

We are pleased to observe that the independent press, understanding the unmistakable intention of the late article on the above subject in the *Washington Union*, follows our example, and administers to the author a fitting rebuke for the gratuitous insult conveyed to the meritorious inventors of our country, and the effort to eventually wrest from them the noble building to whose erection they have contributed so largely. A writer in the *Washington States*, in the course of a communication in answer to the gentleman who wrote the article, says:—

"The building has the right name now, and it should not be changed; especially as inventive genius, patentees, and inventors have contributed largely towards its erection. The Patent Office is nearly a self-sustaining institution, and would be quite so if Congress would only modify the law, as at present required. Its name, at least, should stand the same as long as the arts, sciences and agriculture flourish, or American liberty stands, as there is no department of the government of half the importance to the people at large as is the Patent Office and the Patent Office Reports. To this every Member of Congress can attest, by the great demand for the Reports by their constituents.

As to the Interior Department, of which the writer referred to speaks so highly, there is no one who disagrees with him. It is a department of great utility to the country, and no one should wish to rob it of an iota of its great power and good influence, especially under the able, judicious, and honest management of its present chief. But a building for this great department, it is believed, should be erected separate from the Patent Office—one that would amply accommodate its numerous bureaus, and one equal in every respect to the magnitude of its business."

The *Washington Star* is no less earnest in its denunciation of this attempt to divert the building from its original and legitimate design, and in answer to the *Union*, makes the following appropriate remarks:—

"The *Union* seems to regard the name of 'Patent Office' as too insignificant to be applied to so noble a structure. On the contrary, we think the name suggestive of the grand, lofty, and ennobling; and that no building can rise, even in imagination, as too splendid to enshrine the model machinery of inventors—true benefactors of mankind. The press on which it prints its ideas of the insignificant 'Patent Office,' should teach it to be grateful to the genius that gives it the facilities it possesses—the rollers that ink its type, the type itself, its news by telegraph, the gas that turns night into day in its office, in fact, almost everything it enjoys should admonish it to look with admiration and even awe on the god-like productions of genius.

Inventors, as a portion of the productive utilitarian classes, are the true nobility of our land. By them, and for them, governments are instituted. The name 'Patent Office' indeed adds dignity to the building, because it suggests and embodies the power and might of American genius, progress and sovereignty. It is in a Patent Office that the American people can best be seen and appreciated, for there

is embodied much indeed of their mind—of that which distinguishes them from all other nations."

Swill Milk.—Wise Officials.

The majority of our readers are, no doubt, aware that in this good city of New York, it has lately been discovered that for some time past our lacteal beverage has been of the variety called "swill;" and as this is not conducive to the bodily welfare of the inhabitants, the Board of Health set to work upon the milk question, intending, no doubt, to "reform it altogether." To do this more effectually, witnesses were examined, investigations and official visits (of which due notice was given) were made; and the sheds which had been reported dirty were found clean; and such was the tenderness of the cowkeepers that the diseased cattle were sent into the country for their health immediately before the visit was made. The result of all this was a report, or rather two reports; one, that of the majority, containing analyses of swill milk by Drs. Doremus and Chilton, was in every way favorable to the swill milk; the other, the minority, not having \$500 to pay for analyses, were obliged to content themselves with old analyses by Dr. Reed, and their report was opposed to swill milk.

We have hitherto been silent on this subject, surrounded as it was by so many personalities, and so much excitement, but when our city officers—those appointed to guard the health of the city—sanction, with a few suggestions, the practices of the cowkeepers, we must protest. Because the analyses show the milk is good, that only proves that, chemically, it is pure; but air, carrying with it the yellow fever, or while sweeping over a land laden with pestilence, is chemically and microscopically pure: You cannot weigh, measure, and detect the germ of disease, as you do the lime in chalk; and any reasonable person can at once see that the milk of any animal fed upon an unnatural diet must be unhealthy and dangerous. It seems to us that the Board of Health is composed of men whose sublime philanthropy outweighs even the duties of their office; and that whenever they are about to investigate a nuisance or inconvenience, they send a courier beforehand to announce their advent, in order that the nuisance may be removed, and they will be spared the pain of catching a fellow-citizen at a disadvantage. This has evidently been the case with their swill milk investigation, for they have not observed things which are to be seen every day, and as a result they have lent their official name to the support of a system of stock and cow feeding which cannot be other than prejudicial to the welfare of the community. When will officials be appointed for their capabilities, and when will old ladies be refused admission to a Board of Health?

Foreign Estimation of Inventors.

In European countries, inventors of meritorious articles are not only regarded as general benefactors, but receive that deference and distinction which superiority of mind should command, no matter what may be the channel of its development. In those countries it is not thought beneath the dignity of the most elevated in station to devote their minds to the advancement of science and mechanical inventions in all their details, and hence a pre-eminence is given to all engaged in these praiseworthy undertakings. In the lists of patents issued abroad may be found the names of persons of high rank in connection with inventions calculated to produce good, yet of such an apparently trivial and common-place character as would shock the nicer sensibilities and false pride of many of our aristocratic philanthropists and money-making men of science, did they see their names in connection with them. To all such persons we commend the example of the many persons of eminence in Europe, who, having produced an invention advantageous in its character, think it an honor to reap fame or emolument from its introduction to the public under the fostering care of their names and patronage.

Horseshoeing.

[Continued.]

The safest guide to the proper amount of seating is to apply the shoe to the foot, and observe whether there is room for a picker to pass freely between the shoe and the sole; if there should not be sufficient space for a free passage all around the shoe, the seating must be increased; and if there should be more than is necessary, it must be diminished. The smith, having carefully prepared the foot, and selected a shoe with a proper amount of seating for it, has next to cut off the heels, and fit the shoe to the foot; and he must always bear in mind that fitting the shoe to the foot does not mean fitting the foot to the shoe—an error that smiths are prone to fall into.

Having cut off the heels and opened the nail-holes, the next thing to be done is to turn up a clip at the toe, preparatory to fitting the shoe to the foot, which latter operation should always be commenced at the front of the foot, and be gradually and carefully carried back to the quarters and heels. Every shoe should have a clip at the toe, to prevent the shoe being driven back on the foot, and bending the nails in the crust. But I strongly object to the clip which I often see turned up on the outside of a shoe, which is not only useless, but destroys more horn than two or three nails would do.

Fitting the heels will call for a little extra care at first, as it involves the abandonment of some deep-rooted prejudices and groundless fears. First, the prejudice in favor of square heels projecting beyond the hoof, both behind and at the sides, must be yielded; and the fear lest the smallest portion of the shoe should happen to touch the frog must be given up, before anything like accurate fitting can be obtained. The edge of the shoe must be made to correspond with the edge of the hoof all around, from heel to heel, and to do this effectually, and keep the web of the shoe as wide at the heels as it is at the toe, the heels must be brought in until they very nearly touch the frog. I would not have them bear on the frog, but I would rather see them touch it than be able to lay my finger between the frog and the shoe.

There are many advantages attending the bringing in of the heels, and not one single disadvantage to set against them. In the first place, it removes all the points and projections by which stiff ground is enabled to pull off the shoe; in the next place, it affords a good, firm, flat surface for the heels of the hoof to rest upon, and, by bringing the sides of the shoe nearer together, the navicular joint, which lies in the hoof above the frog, and about an inch from its point, is saved from many an unlucky jar from a stone in the road, by the shoe receiving it instead of the frog.

The inner quarter is not only straighter and more upright than the outer quarter, but the crust is thinner and more elastic, and consequently expands in a greater degree to the horse's weight. But when we talk of the hoof being elastic and the foot expanding, we would by no means have it inferred that they bear any relation to the elasticity or expansion of india rubber; if they did, the bones of the foot would be thrust through the hoof during violent action, or in a down leap. The elasticity and expansion are small in degree, scarcely exceeding the eighth of an inch in the feet of most horses, that have been several times shod, but they are most important in their consequences, by affording exactly the amount of enlargement of the cavity necessary for the descent of the bones of the foot, without squeezing the sensitive parts which line the hoof.

A large number of flat-footed horses cannot go safely at any time without some protection over the sole, and all horses would be benefited by it when the roads are strewn with loose stones; but it is a mistake to suppose that leather, or any substitute for it, inserted between the shoe and foot, calls for a greater amount of fastening than five nails; they will retain a shoe, with leather under it, as firmly as if the leather were not there. All