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Protection of Designs for Articles of Manufacture.

We learn from a recent number of the Philadelphia Ledger that petitions are now in circulation in that city to obtain signatures, requesting Congress to extend the laws of copyright to all original designs to be printed on paper or cloth, or woven with other fabrics, and all original designs of forms or for ornamenting any article of manufacture, so that the author or proprietor of such original design shall be entitled to an exclusive property therein for a term not less than three years. The Ledger takes occasion to commend this movement as a very proper one for the protection of persons engaged in the business of originating and preparing designs for articles of manufacture. It says:—

“Without such protection it is in vain to look for that improvement in manufactures which will enable our manufacturers to compete with the most expert and skillful of other nations. Those who expend money in improving their productions ought to have the benefits of such improvement. If they may be seized and used by others, without compensation, the moment they are perfected and made public, the inducement to persevere in such inventions is destroyed, and our manufacturers will be content, therefore, to be the servile copyists of others, and always be behind them in originality and skill. Designs are just as much the result of labor, of money, and mind, as books and machines, both of which enjoy the benefit of legislative protection for definite periods of time, and the effect has been to stimulate, in a high degree, both of these departments of intellectual labor.”

The remarks of the Ledger exhibit a true sympathetic spirit with inventors, but such a movement in the city of Philadelphia, rather surprises us. Such a law as the petitioners referred to pray for, is now in existence, and every new and original design can be protected by it, not for three years merely, but for seven years. This law was passed on the 29th of August, 1852. Section third of the Act says:

“A citizen or citizens, who, by his, her, or their own industry, genius, efforts, and expense, may have invented, or produced any new and original design for a manufacture, whether of metal or other material, or materials, or any new and original design for the printing of woolen, silk, cotton, or other fabrics, or any new and original design for a bust, statue, or bas-relief, or composition in alto or basso-relievo, or any new and original impression or ornament, to be placed on any article of manufacture; or any new and useful pattern, or print, or picture, either worked on, or printed, or painted, or cast, or otherwise affixed on any article of manufacture,” &c. “on application for a patent to the Commissioner of Patents, on due proceeding had he may grant a patent therefore,” &c.

This law fully covers all articles of design and ornament, and grants the authors of such protection in their invention for seven years. The people of Philadelphia do not require any new law to protect the class of objects named by the Ledger, as the present law is very full and complete, embracing the marks adopted by tradesmen to distinguish their own manufactures, as well as all designs of artists.

The present law, however, might be amended so as to reduce the patent fee from \$15 to a smaller sum, such as \$5, or even one dollar. Very few artists or manufacturers (excepting those engaged in the stove business, who thus exhibit great spirit,) take advantage of the law for protecting patterns, or articles of design; and we think it must be owing to their want of knowledge regarding the existence and provisions of such a law, or else it must be owing to the fee (\$15) being too high. We have no doubt but far more articles of design would be patented, if the fee were reduced to five dollars. As this sum would be sufficient to cover all the expenses of the Patent Office, in registering designs, it would be an act of national policy to reduce the fee to this standard. We have been informed that most of the designs or patterns used in our calico, oil cloth,

and paper print-works, are mere copies from the French, and simply for the reasons assigned by the Ledger, namely, that it will not pay to expend much money in getting up new designs, because they are seized upon and made use of by others in the same line of business, whenever they are made public. Now, while the fee of \$15 for a patent on a good design, can offer no excuse for a manufacturer not protecting every beautiful new pattern or design, we also believe that a cheaper means of protecting designs would promote a spirit to get up more original ones, and thus improve the national taste—transforming our pattern artists into original designers, instead of mere copyists of foreign patterns and designs. Our people have a fine taste for the beautiful; of this they have given samples to the world in the persons of West, Stewart, Alston, Cole, and a host of other distinguished painters; and in the persons of Powers, Greenough, Crawford, and other sculptors.

We go for the encouragement of improvements in all things—in articles of taste as well as utility. If by reducing the patent fees for designs from fifteen to five dollars, will be the means of encouraging a taste for getting up beautiful original designs for machines such as lathes, frames of steam engines, &c., calico patterns, &c., and even handsome labels for parcels, we go for it, with all our heart: “progress and improve,” is our watchword.

The Manufacture of Coke.—Railroad Fuel.

The substance named “coke” is simply coal charcoal. It is but little known in our country except in cities where gas is made from bituminous coal, and in those localities where iron is manufactured in the neighborhood of our bituminous coal fields. In England it is manufactured on a most extensive scale in all the coal mining districts, and is used extensively for smelting iron, copper, and other ores. It is employed in all the brass and iron foundries there, and is the only fuel used on locomotives. The manufacture of it, therefore, is an important business in that country, and why not in ours? We have bituminous coal fields of an area so large that those of England, in comparison to them, are like mere onion beds to extensive plantations; and yet we have been informed that the quality of our coal is unsuited to the manufacture of coke, and in this respect is inferior to English coal, especially for locomotive fuel. We do not believe this; we are confident that as good coke for fuel can be made from some kinds of American coals as from English coals. If so, would it not be well to manufacture it, and use it on railroads as a substitute for wood fuel? The price of wood is continually rising in the Eastern States, and the railroad companies must soon be driven to adopt some other kind of fuel. Thus, on the Western or Boston and Albany Railroad, the bill for fuel last year exceeded that of the previous one by \$50,000, and that of the previous year exceeded that of 1852 by \$50,000. The increasing expense for wood on this railroad has greatly exceeded the natural increase of business, and the Directors of it are deeply impressed with the necessity of obtaining a cheaper substitute. If coal-burning locomotives can be made to run more economically, and can be as easily managed as those which now use wood, then nothing more is wanted, for assuredly, it must be more economical to use anthracite coal for fuel than to use cooked coal, (coke) or wood. But if good coke can be obtained cheap, there is no difficulty in the method of using it for locomotive fuel, like that which has hitherto been experienced in the caking of anthracite coal in the fire-boxes of these engines. We apprehend that the coke which has been tried and condemned on several railroad experiments was not well made. We know that in some experiments made on the Hudson River Railroad with the coke obtained from our city gas works and some from Pennsylvania, the former proved to be far superior, and for the simple reason, we believe, that the coal from which it was made was subjected to a much higher heat in the retort than the Pennsylvania coal, which was coked in ovens. There is a manifest advantage in subjecting bituminous coal to a very high heat in coking it. The longer and higher the heat to which it is exposed the more it contracts, and consequently the more dense it becomes. We are of

the opinion that our coke burners do not subject their coal to such a high degree of heat, nor do they maintain the heat so long as they should do in their coke ovens. These defects in the manufacture of coke, rather than the quality of our bituminous coal, we are of the opinion, have been the cause which produced the defective coke that was experimented with and condemned on several of our railroads.

It may be said that coke can never be manufactured cheap enough at our great bituminous coal fields in the valley of the Ohio, so as to be carried to the East and used for fuel; it having more bulk than anthracite coal, its carriage must be more expensive, therefore it is much wiser to exert every energy to incite every faculty of inventors to produce perfect anthracite coal-burning locomotives. These reflections are indeed worthy of being acted upon; they touch the very root of the matter, but at the same time they should also excite the owners of mines in our bituminous coal fields to greater exertions in the manufacture of good coke. All the volatile products of coke ovens have hitherto been allowed to escape into the atmosphere, no attempt has been made to save them. Now we believe that it might be found profitable to manufacture a superior kind of coke, save the volatile products, and employ them for useful purposes, especially the ammonia contained in them, which might be saved and converted into valuable salts for agricultural purposes.

We have received communications from time to time, from various correspondents engaged in the iron manufacture in different parts of Pennsylvania, Virginia, and Ohio, requesting information respecting the removal of sulphur from coal in making coke. We remember the tenor of one received about three years since, which ran thus:—“Do you know any method of removing the sulphur from coal in the manufacture of coke, which I use in smelting my iron? I believe it is the principal cause of making inferior iron, and if it were entirely removed a very improved quality would be the result.” We could not then give him the desired information, but now we have something to say on this very point. At the late meeting of the British Association of Science, Prof. Calvert read a paper on the iron manufacture, in which he stated that by mixing about half a bushel of common salt with every tun of coal in the coke-oven the coke so made gave off no sulphurous fumes, and when used in a cupola in smelting, it produced iron much closer in grain, and 20 per cent. stronger than that made from common coke. This coke was also superior for locomotive use. This information may be of importance to some of our iron manufacturers, who might also try the effects of salt in their blast furnaces, as Prof. Calvert stated, that when thus used it improved the iron, though not to such a degree as by using the purified coke.

Hints on the Value of Patents.

We are informed that a sale of a portion of the right to Wood's Patent Shingle Machine has lately been made at Albany, N. Y., for the sum of \$35,000. It is a good invention, and the purchasers will probably quadruple their investment in a short time.

It is understood that the Messrs. Jerome, of New Haven, Conn., the celebrated clock makers, have recently purchased a portion of the right to Robertson's patent Sewing Machine for the sum of \$30,000. This sewing machine is said to be a remarkable novelty. In size it is scarcely larger than the little sewing birds used by the ladies, and may easily be carried in the pocket. In external appearance it is highly ornamental. Its construction is so simple that a child of five years can operate it with success. For the use of families and individuals the invention appears to be admirable. We are told that a seamstress with the aid of one of these machines, will be able to do in one day the ordinary hand labor of an entire week. The Messrs. Jerome are at present engaged in constructing machinery for the manufacture of this improvement on a large scale, and in January next will be ready to fill orders. Retail price of the machine, \$10. The best sewing machines of the other makers cost from \$100 to \$140.

Speaking of sewing machines reminds us of the profit on Howe's Patent. The income of

this inventor from licenses to use his shuttle, is said to be over \$50,000 a year. Messrs. Singer & Co. are said to be making money at the rate of \$75,000 a year from their sewing machines. The Wheeler and Wilson Sewing Machine Co. are understood to make \$30,000 per annum. We might speak of a number of other very successful inventors and manufacturers in this line of business, but it is unnecessary.

Rights for Sandford's Patent Hand Corn Planter, we are informed, have been sold to the amount of \$30,000. Wakefield's Patent Hand Corn Planter has been sold for a still larger sum; a single manufacturer of this invention at New Haven, Conn., is said to have realized a profit on the same of \$40,000 during the past year.

Wm. Mount Storm's Patent Cloud Engine is reported to have been sold to a company of wealthy gentlemen in this city. Capital stock paid in, \$500,000, of which a large proportion was received by the inventor.

D. W. Clark, of Bridgeport, Conn., is understood to have received \$30,000 for his Patent Pump.

One half of a certain patent Curtain Fixture contrivance, which permits the curtain to be raised or lowered from the top, is said to have sold for \$4,000.

A small portion of the right to Smith & Fenwick's Patent Apple Paring Machine lately brought \$2,000.

Creamer's Patent Car Brake is said to have been purchased by a company for \$250,000.

A single right to use Winter's Patent Wood Sawing Machine has been sold to a certain railroad company in this vicinity, we are told, for \$2,000.

A single right to use Kison's Patent Cotton Picker, sold to a certain factory, brought the inventor, if our information is correct, the sum of \$2,300.

We could fill our paper with facts like the above, if we were to take time for their collection. They are of use and interest as illustrating the value of all kinds of patent property; they are likewise encouraging and stimulating to inventors. It is chiefly for this latter reason that we have presented them. At the present moment we think of no class of individuals who enjoy such golden opportunities of success as those whom Providence has favored with a genius for mechanics. We are not surprised that this country so abounds with new inventions; the only wonder is, that there are not ten patents where one now exists. The demand is far greater than the supply.

The long evenings of winter present ample time for thought, and should be constantly improved. Those who have tried to invent, but failed, should try again. If effort be earnest and continued, the light will at last break through.

Persons who invent, or become interested in inventions should remember one thing: no discovery is of much pecuniary value in this country until it is patented. The first step, therefore, after an invention has been thought out, is to secure its advantages, by law, as soon as possible. A neglect of this simple duty has, in many instances, been the means of dashing from the lips of the inventor, the cup of happiness which he was about to quaff. It is an old maxim that tells us “Delays are dangerous.” In regard to the obtaining of patents this is emphatically true.

Woodworth Patent Remonstrances.

At the request of several of our subscribers, we have had printed a large number of petitions against the extension of the Woodworth Patent, which we are anxious to have distributed as soon as possible. They ought now to be put in active circulation for signatures: let this be done without delay, and there is not much fear of the result. Upon the receipt of two three-cent postage stamps, we will forward a petition and pre-pay the postage. Send in your orders as fast as possible.

Australian Expedition.

An expedition has been fitted out in Australia to explore the Victoria river. The party is composed of eighteen persons, and will be absent three years. It is believed they will bring back much to add to the treasury of natural and geological knowledge.

The factory of Mr. Kellogg, in Skeneateles, N. Y. is lighted with the Benzole light.