

ITEMS CONCERNING THE PATENT BILLS.

The first meeting of the Senate Committee on Patents since the passage of House bill 3,925 was held on Monday, March 17, at which were present, among others, W. D. Andrews, of New York City; S. J. Houck, of the Champion Works, of Springfield, Ohio; Thos. K. Kays, celluloid manufacturer, of Newark, N. J.; A. J. Nellis, of Pittsburg, Pa.; Andrew Allbright, of Newark, N. J., a number of other manufacturers and inventors, and several patent attorneys. Ex-Senator Norwood made a strong argument against the passage of the House bill, first taking the broad ground that the Constitution prohibited the passage of such a bill, and then opposing it upon the ground of public policy. Its passage, he said, would eventually destroy four-fifths of the patents in the country.

"He that asks for equity," continued the senator, "must do equity. He that asks for another man's property should offer to pay its value. If he does not, he should surrender the property. Who, of all the users of the driven well, for instance, has ever ceased to use it, when asked to pay for it? Any one can have it for life on payment of \$10. And when it is offered for \$5, many refuse to pay, though they would not do without it for hundreds of dollars. And this is the class who are asking Congress to compel the owners of that property to 'buy justice, or to submit to conditions not imposed upon their fellows (themselves) as a means of obtaining it.' And that, says Judge Cooley, is in violation of the Constitution.

"This bill would divide our citizens into two classes—owners of patents and non-owners. Then, it says to non-owners: 'You can have justice without buying it;' and to patent owners: 'You can have justice, provided you first give bond for \$50, and take the chances of buying it or not buying it, as you may make proof or not of \$20 damages, and as you may prove guilty knowledge by relying on the defendant's conscience. Then, it subdivides patent owners into two classes, and says to one, if you have a demand for over \$20 you need not pay costs, but if your claim is under \$20, you must pay your own way, that is, *buy justice*."

Mr. Thos. K. Kays then argued against the bill from an inventor's and manufacturer's standpoint, saying that he had spent \$20,000 in inventing and perfecting a certain invention, which had been patented, both as to the process and manufacture, and that the proposition was now to take away from him the protection that was guaranteed him by his patents. He showed how his invention had benefited the community by reducing the cost of the article over one hundred per cent, and giving a better article than was used before his invention. He referred to other patented articles where the public benefit had been equally as great, and then denounced the bill as a breach of faith between the Government and the inventors.

Mr. Allbright also spoke as an inventor, and urged the committee to pause before they committed a great wrong in the passage of the bill under consideration. He believed it was but an entering wedge, which, if passed, would be followed by other bills, until the entire patent industry of the country would be destroyed. He urged that, instead of passing a bill of this character, they should pass one punishing the piracy of an invention with fine and imprisonment just the same as the theft of a horse or a watch.

Mr. Nellis pursued the same line of argument, and then Mr. Andrews spoke in reference to the scope of the bill and its injustice, and illustrated it by showing the course adopted by the customs officers of the government. If goods are brought to the custom house, the duties paid, and they are taken out of bond and sold to other parties, and it is then discovered that insufficient duty has been paid, the government will promptly proceed against the innocent purchaser. The inventor or manufacturer is granted no more power under his patent in defending his rights than has the government in collecting its just revenue; but he is entitled to an equal protection.

Mr. Winans, of Wisconsin, said his people have been harassed by the operation of patents. When pinned down to the character of the patents that caused the annoyance, he admitted that they were mostly in regard to the drive well or barbed wire fence.

Mr. Platt, the chairman of the Senate Committee on Patents, admitted that since the passage of the bill 3,925 by the House, he had received two protests by large manufacturing firms in his State.

Senator Mitchell, of Pennsylvania, also said he had received numerous telegrams and letters from manufacturers in his State, protesting against the passage of the bill, and that these protests were such that they could not be ignored or lightly treated.

Other senators and members have been seen, but who are unwilling at present to be quoted, many of whom are surprised at the storm that has been raised by the passage of House bills 3,925 and 3,934, and who are now beginning to look up statistics and to realize how widespread an interest is the patent industry and how closely it is interwoven with almost every other industry. Those who voted for the measures in the House do not believe that they are right but think, as one of them expressed it, that "it is a sop to the people who have suffered from suits on account of the drive well and the barbed wire fence."

How seriously the Western farmers and railroad people have "suffered" from the barbed fence patents will be understood when we state that prior to the introduction of the patent the cheapest fence that could be had—boards—cost the farmers one dollar a rod, against fifty cents a rod for

barbed wire fencing. Statistics show that from 1874 to 1883, a period of only 8 years, the railways and farmers have saved a little over *eight hundred millions of dollars* by the use of the improved wire fencing. Now they begrudge the patentees their slight royalty, want Congress to change the patent laws and destroy all patent property.

The press of the country is doing noble service in opposing this communistic legislation. We have upon our table copies of many influential papers containing vigorous editorials upon the subject. We regret that our limited space precludes extensive quotation.

The whole subject is covered in a very amusing way in the following, which is from the *Spike*, of Prophetstown, Ill. The editor says:

The following has been handed us as a substitute for the amendment to the patent laws lately passed by the House of Representatives: "Now, therefore, these letters patent are to grant unto John Smith, his heirs or assigns, for the term of five years the *exclusive* right to make, use, and vend the said invention throughout the United States and Territories thereof, provided that the said John Smith shall send written notice to each and all persons, throughout the United States and Territories thereof, that might wish to manufacture the articles, that the same is patented. And be it further understood that the *exclusive* right of the patentee does not hold as against persons who may wish to manufacture the said patented article for themselves or for their employers, and not for sale or profit. All such persons shall have equal rights to the invention with the patentee, and the patentee must not under any circumstances harass or annoy the last named persons by letters, protests, or threats, under penalty of forfeiture of the aforesaid *exclusive* right."

FINISHING BY PRESSURE.

Articles of wrought iron and steel, as parts of machines, guns, and small tools, are largely made by the process of drop forging. Thus shaped in dies they require only surface finishing, as their forms are secure and nearly perfect. Many of these articles require, however, the milling machine or hand filing to dress them previous to polishing. This work can be saved in many instances by compression finishing. Sewing machine shuttles and small gun parts, pistol frames, fork wrenches, and many other small pieces, are subjected to pressure while cold, with the result of producing a very clean and even surface. Under a pressure of 800 tons a small piece, like the hammer of a percussion lock gun, comes out of the compression dies as clean and smooth as the faces of the dies themselves will permit. In fact, the process is exactly like that of minting gold, silver, nickel, and copper blanks; the cold metal is compelled to flow and fill the dies. Under such a pressure drop forged Norway iron, after been subjected to the tremendous impact of the drop forging hammer, will yield to a permanent compression of one four-hundredths of an inch.

A LONG STRAIGHT EDGE.

An absolutely exact straight edge of more than thirty-six inches is a wonder of mechanism. One of six feet was not recently believed possible, although several had been made on different plans of web-like and truss construction. It has been claimed, however, that almost absolute exactness has been secured by a straight edge twelve feet long. The appliance looks like an arched truss, the highest spring of the arch being only twenty inches in a length of twelve feet. The space between the chord and the spring is filled with diagonal lattice work; the whole is a casting on which no peening with the hammer is allowed. Three of these straight edges have been made, one remaining in the establishment where built and two going to technical colleges. Each of them has been tested by each other, and proved to be practically perfect. Such a tool is invaluable in testing lathe and planer beds.

Hostility to the Patent Laws.

The present House seems prolific of measures dangerous to the interests of the people, and if the Senate does not hold a steady check upon the vicious tendencies exhibited in the House, we may expect a batch of most pernicious laws. The wholesale attack made upon the Homestead and kindred acts has been followed by the introduction of no less than fifteen different bills intended to cure defects in the patent laws and protect the farmers of the West against impositions practiced upon them by patentees and their agents.

There should be no objection to a judicious amendment of any law which experience has shown to be defective, but the various measures proposed are so radical and sweeping that they overturn the existing order of things, unsettle long recognized principles, and deal very harshly with the rights of individuals.

Taken as a whole, the tendency of these bills is to lessen the rights of the inventor and facilitate infringements on the part of those who feel disposed to deprive patentees of the profits resulting from their inventive skill. Should the bills pass in the form proposed, hundreds of patents which have cost their owners much labor and many thousands of dollars will become practically useless because they cannot be successfully protected against infringements.

America has become renowned as the home of inventive genius, and it would be impossible to estimate the advantages which have resulted, not only to the United States but to the whole civilized world, from what is generally known as our "Yankee ingenuity." Our patent laws are essential

to our prosperity and development, and unless it can be clearly shown that they are something more than just and equitable, they should not be nullified and thrown into hopeless confusion. There is not much prospect that the House will stop short of the most radical changes, but the Senate should give the matter their most careful and deliberate consideration.—*Pittsburg Commercial Gazette*.

Protest by Pennsylvania People.

A meeting of inventors and manufacturers, owners of 500 active patents, and representing a million dollars capital, met in Erie, Pa., March 20, at the Board of Trade rooms, to enter a protest against the bills pending in regard to patent rights. A memorial will be sent to the Senate at once. Great indignation was expressed at the hasty action taken in this important matter in Congress.

The Cincinnati Convention.

The convention announced to meet on the 25th of March will assemble while this number of our paper is going through the press. Reports will be given in our next. Delegates are expected from all the States, and from Canada.

The address says: "The time has arrived when it becomes necessary for inventors and patentees to assert and maintain their rights against the encroachments of the large corporations and certain individuals who for selfish ends have made strenuous efforts to subvert the present wise and beneficent patent laws, and engraft such legislation on our statute books as will make every inventor, present and prospective, a prey to greed and rapacity."

Resolutions of the Pittsburg Chamber of Commerce.

A special meeting of the Chamber of Commerce was held March 20, 1884, President John F. Dravo in the chair. After some discussion, the following protest and resolution was adopted unanimously:

PROTEST OF CHAMBER OF COMMERCE OF PITTSBURG AGAINST THE PASSAGE OF HOSTILE PATENT BILLS BY CONGRESS.

The Chamber of Commerce of Pittsburg earnestly requests our Senators and Representatives to give the various bills before the Committee of Patents careful consideration, and endeavor to prevent legislation which in effect will discourage active minds from engaging in the development of machinery and appliances such as have been and are of so great benefit to all our agricultural and mechanical interests.

We call special attention to House bills 3,617, 3,925, 3,934, and Senate bill 1,558, and all others of like import, proposing legislation of a mischievous character, of wrong to inventors and injury to our manufacturing interests.

Resolved: That copies of these proceedings be forwarded to our Senators and Representatives.

JOHN F. DRAVO, Prest.

Utilizing Factory Waste Liquors.

The waste liquors flowing from woolen mill works, although at one time deemed of very little use, are now converted into various articles of considerable commercial value. Messrs. Donaldson & Co., oil distillers and refiners, of Hawick, Scotland, have succeeded in turning to good account the greater part of this waste.

The liquid in the original state is the waste arising from the scouring of woolen goods and yarns, the technical designation of the recovered product being "magma." This material, which has a soft, spongy appearance, is put into canvas bags and subjected in hydraulic presses to a pressure of about two tons to the square inch. The oily matter finds its way from the canvas, leaving a black-looking refuse which is used afterward for top dressing and hop growing. The oil is then distilled, and a combination of cloth-oil and stearine produced. This distillate is afterward separated by being enveloped in sailcloth sheets, the oil, as before, coming through the sheets, and the stearine remaining in them. The oil is largely used in wool and jute spinning, and the stearine in the manufacture of composite candles. The stearine itself, if wanted of a very high quality, is again repressed between sheets of sailcloth and hot iron plates, and then becomes the beautiful product known as hot-pressed stearine, used in the making of tapers. In the process of distillation a hard black pitch is left in the stills, and this, it has been found, is invaluable as a lubricator in iron rolling mills, it cases where the journals get so hot that an ordinary oil would evaporate and take fire. A light spirit oil is also got in the course of distillation, and this is serviceable for dissolving India-rubber. The cloth-oil is also converted into soft soap. When all these processes are completed, the only remnant of the spongy "magma" is a pure liquid, as clear as the clearest water, and this is the sole part of the original refuse for which a purpose has not as yet been found.

Not the least of the benefits accruing from these operations would be the freedom from pollution of these streams which now carry off this waste, and the consequent ceasing of the complaints now made by riparian proprietors. But in order to accomplish this most desirable end, the process must be simple, effective, and cheap.

Ganomite—a New Lead Mineral.

Sjoergen has analyzed a new mineral from Nordenskjöld called *ganomite*, and finds that it is a double silicate of lime and lead, having the formula

