

Scientific American.

ESTABLISHED 1845.

MUNN & CO., Editors and Proprietors.

PUBLISHED WEEKLY AT

No. 361 BROADWAY, NEW YORK.

O. D. MUNN.

A. E. BEACH.

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NEW YORK, SATURDAY, JANUARY 8, 1887.

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For the Week Ending January 8, 1887.

Price 10 cents. For sale by all newsdealers.

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THE ANNUAL ATTACK UPON OUR PATENT LAWS.

It is with a feeling of genuine regret that we announce the commencement of the annual attack upon our patent laws in the House of Representatives. It is in no idle spirit that we make this statement. Our duty in the matter extends far beyond the noticing or chronicling of the event. The remedy and antidote is to be provided. Let our readers take individual action in the matter; let every Congressman hear from his constituents in unmistakable tones that the patent system of America is not to be disturbed, and the work will be done. Whatever bills menacing the rights of inventors shall be brought forward, a single warning will apply to all.

The bill we particularly allude to is one that was introduced during the last session in the House of Representatives by Mr. R. W. Townshend, of Illinois. Its number is 4458. This year it has been again brought forward, and it was the subject of debate on the 20th of December in the House.

Its provisions are in brief that the United States courts shall have no jurisdiction in patent cases where the damages do not exceed \$200, and that purchasers of a patent right for actual use shall not be liable for its value or for infringement in any way if, at the time of its purchase, they had no knowledge of the claims of any third party.

By one provision, infringement of the multitude of small patents is legalized. Any one could use patented churns, sewing machines, mowers, reapers, minor improvements in steam engines and general machinery, without reference to the inventor. It is well within the truth to say that a vast majority of cases of infringement could be brought within the operation of such a law.

In its second clause, the innocent purchaser of a patent right is upheld in his bargain. He may buy what another has no right to sell, playing the part really of a receiver of stolen goods, and in this transaction he is to be protected by a congressional enactment.

With the constitutionality of this act we have no affair. It is enough to say that in the debate concerning it, its unconstitutionality, its want of clearness, and its surplussage were all subjects of attack. Our concern is for the interests of the country at large. The industries of America have been built up on and repose upon patents. Every factory large or small uses in its machinery numerous patents. Every individual workman has patent tools that expedite his labors. The farmer is perhaps more directly benefited by patents than any one else. Instead of swinging a scythe of unimproved construction through a long eleven or twelve hour day, with the result of one acre mown at the end of it, he sits at ease upon the seat of a patented harvester, and with a team of horses reaps and binds, without other help, thirteen acres of wheat a day. Reapers, self-binders, and harvesters do the work of the West, on the great prairies. In the East, where smaller farms are the rule, the hand tools used are all subjects of patents. Without the patent system, none of these implements, large or small, would have been invented. The Townshend bill professes to be aimed at the protection of this particular class, the farmers, from some mysterious "black-mailers." The existence of the latter is quite doubtful. But if such do exist, and work detriment to the agriculturists, their measure of harmfulness is nothing compared to the evils threatened by this bill. Even more than the manufacturers, the farmers should oppose it. The very class for whose protection it is professedly introduced are attacked by it.

And now we may more explicitly state what action should be taken by all who have the welfare of the country at heart. They should address their representatives in Congress. Manufacturers whose capital is pledged upon the maintenance of patent rights; farmers who could not profitably cultivate their land but for patented agricultural machinery; workmen employed to run, and who earn their living by running patented machinery to manufacture patented articles, should be heard from. Especially should the constituents of any member known to be opposed to patents address him, and tell him of their wishes.

THE MULTICHARGE CANNON.

Colonel Haskell asks Congress for an appropriation for the further test of the multicharge gun, with the expectation of furnishing a cannon that will beat the world. The trials of the Haskell gun at Sandy Hook developed the fact that his 6 inch gun, of poor metal, with a projectile of 111 pounds and powder 116 pounds, showing a pressure of 25,000 pounds at the 4th pocket, had a greater range and penetration than a Krupp 11 inch breech loading gun, of best steel, which showed an initial pressure of 40,829 pounds per square inch, projectile 760, powder 254 pounds. The contrast is great, and the results established by the trials are sufficient to warrant the construction of additional Haskell guns of best materials and workmanship for further experiments. We believe no gun of a power equal to Haskell's, size considered, has ever been produced in this or any other country. If pro-

perly made and used, the weapon promises to surpass all others. It is, moreover, a purely American gun, and its further development should be liberally encouraged. The novelty consists in attaching to the barrel of the gun, at intervals along its length, a series of exterior powder pockets, that communicate with the interior of the barrel. The ball is started from the breech by a moderate charge of powder in the usual manner; when the ball passes beyond the first pocket, the burning powder fires the charge contained in the pocket, and its pressure is added to that of the initial charge, and so on; each pocket of powder contributes successively to add a new pressure behind the projectile. The aggregate pressure of the whole powder used is thus delivered gradually by successive explosions against the projectile, which, consequently, takes a higher velocity and has more power than the ordinary single charge gun. The theory of the Haskell gun is correct, and when the best construction is ascertained, it probably will excel in performance all other forms of ordnance. But "it isn't English, you know," and consequently some of the old army and navy officers sneer at it. Nevertheless, we trust Congress will grant a liberal appropriation for the thorough testing of the new arm, and thus help in showing what home genius can accomplish. Everybody laughed at Ericsson's first little raft, with its iron-cased hoghead on deck. But it silenced the enemy, and all the navies of the world soon copied it. The first Haskell gun has proved quite as successful in its way as was the first Monitor.

REVIVAL OF PATENT NULLIFICATION.

It will be remembered in 1884 an attempt was made in Congress to pass laws in the interest of certain infringers of patents, such as railway corporations, barbed fence makers, drive well infringers, and others, to prohibit patentees from recovering damages for violation of their patents, and making it lawful for any person freely to make and use a patented invention without responsibility to the inventor or his assigns. By some unaccountable folly, two of these hostile bills passed the House of Representatives by very large majorities; they were rushed through without sufficient opportunity for debate, and before their full purport could be understood by the friends of the patent system. The passage of the bills in the House raised a storm of indignation in all parts of the country, especially in manufacturing districts, and among the great body of working people, who depend for their livelihood upon the success of home industries.

To exempt infringers of new inventions from penalty was regarded as tantamount to nullifying the patent laws and wounding all the vast industries that rest upon patents.

The most energetic means were taken to defeat this unprecedented action of the House. Meetings of citizens were held, conventions were called, boards of trade convened, legislatures of States passed resolutions condemning the act, floods of protests were sent to members of Congress, and to crown all, the press of the country discussed the matter thoroughly, and gave unanimous voice against the consummation of a measure so suicidal and unjust. These combined efforts were successful. The bill was disapproved in the Senate, where it was elaborately discussed, and the impression or expectation has prevailed that its revival would not be attempted. But this expectation has proved vain. On the 20th ult. the obnoxious measure, in a new form of words, was brought forward in the House, and its passage urgently demanded.

The following is the text of the bill:

H. R. No. 4458.

Be it enacted, etc., That hereafter the United States district and circuit courts shall have no jurisdiction to hear or to try any case arising from the actual use of any patent right, or its infringement by such use, by any person in or citizen of the United States or the Territories, wherein the amount in controversy does not exceed \$200 against one person or citizen.

SEC. 2. That purchasers of any patent right for actual use shall not be liable to damages, royalty, or for value of the same, or for infringing the same in any manner, who at the date of such purchase had no knowledge of the claims of any third person or that the inventor of the same has an interest therein adverse to the seller thereof. That no person who shall in good faith purchase, use, manufacture, or sell without previous knowledge of the existence of a patent therefor, any article, machine, machinery, or other thing for the exclusive use, sale, or manufacture of which any patent has been or hereafter may be granted to any person, persons, or corporation whatever, shall be liable, in damages or otherwise, for an infringement of such patent until after written notice of the existence thereof shall have been personally served on such person or persons or corporation, as the case may be, and such infringement shall be thereafter continued.

SEC. 3. That all laws or parts of laws inconsistent herewith are hereby repealed.

SEC. 4. That nothing herein contained shall affect any pending suit or proceeding in any of the courts of the United States or in any court of any of the several States.

A bill like this, which overthrows an industrial policy that has been successfully carried on almost since the foundation of the government, which cannot be otherwise than disastrous to all manufacturing interests and to the property rights of patentees, is deserving of the most deliberate consideration and the fullest discussion. But its advocates took good care to prevent this.

Under the rules, only thirty minutes were allowed for debate—fifteen in support of the bill, and fifteen against it. Mr. Townshend of Illinois, Mr. Henderson of Iowa, Mr. Morgan from Mississippi, and Mr. O'Donnell from Michigan were the chief supporters. The principal advocate was Mr. Townshend, and

from his remarks we gather that his most pressing reason for wanting to pass the bill is that a few farmers among his constituents have been victimized to a small extent by parties who pretended to be the proprietors of the drive well patent; and when the rightful owner of the patent appeared and claimed ten dollars each for use of his invention they refused to pay, denounced the demand as an outrage, and have gone to the Supreme Court about it. To prevent the recurrence of such claims, the advocates of the bill ask that the laws be emasculated. But if we take away from the patentee the right to compel infringers to stop piracy and pay for use, we nullify the law, and patents cease to have value.

Some of the speakers for the bill claimed there were thousands of cases of "innocent suffering;" but none of them alluded to any distinctive examples except Mr. O'Donnell of Michigan, who cited, as his worst case, that of a farmer who, after having declined to purchase a certain machine (he does not say what it was) at a reasonable figure from the original patentee, allowed himself afterward to be persuaded to buy an infringing machine of inferior quality. He returned this machine, without loss, because it did not work well; but the original patentee compelled him to pay a few dollars for his infringement in using it. And it is to remedy hardships of this kind on the part of "innocent purchasers" that Mr. O'Donnell advocates the bill.

The chief opponents of the bill were the Hon. N. J. Hammond of Georgia, Hon. Benjamin Butterworth of Ohio, late Commissioner of Patents, and Hon. R. Q. Mills of Texas. Mr. Hammond made a very eloquent and powerful speech against the bill, in which its obnoxious features were clearly exposed. The bill will soon come up again in the House.

SPEECH OF THE HON. NATHANIEL J. HAMMOND OF ATLANTA, GA.

This bill seems a declaration that in all cases where the damages do not exceed \$200 against each person sued, there shall be no suit for the infringement of a patent right. I do not know the statistics on the subject, but I will venture to guess that seven-eighths of the patents granted in this country are of such character that individual infringements will not amount to \$200 damages each. This bill seems, therefore, a declaration that the constitutional protection which is thrown around patent rights shall belong only to those great and magnificent patents involving thousands of dollars, while the men who by their brain and toil have brought forth the small patents shall have no protection from this government.

Mr. Speaker, the section from which I come has very little interest in patents so far as the protection of the patentee is concerned. I can, therefore, have no wish in opposing this bill but to protect the rights of American citizens wherever they are involved. The Constitution declares that Congress shall have power—

"To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."

The Supreme Court of the United States has more than once declared that a patent is a solemn contract between the patentee and the government, by which the exclusive use is granted to him for a limited time in consideration of public use ever afterward, and which, like any other contract, can be set aside only for fraud. This bill, therefore, in effect seems to declare that seven-eighths of all the patents in the United States shall by these three sections be cut down so as to be practically valueless. For, mark you, the bill gives no jurisdiction to a State court, and under the present law no State court has jurisdiction of any suit for the infringement of a patent.

This first section, it will be observed, has nothing to do with good faith or bad faith. Under it a man may in open market buy or sell a patent without authority in the patentee's face, and answer, "I damage you only to the amount of \$199, and you cannot sue me anywhere." That is the first section of the bill as it seems to be intended.

Now, let us look at the next section, the section as to *bona fide* purchasers. I have shown that the first section has nothing to do with good or bad faith. Here is the section in regard to *bona fide* purchasers:

"SEC. 2. That purchasers of any patent right for actual use shall not be liable to damages, royalty, or for value of the same, or for infringing the same in any manner, who, at the date of such purchase, had no knowledge of the claims of any third person, or that the inventor of the same has an interest therein adverse to the seller thereof."

Now, Mr. Speaker, when a man obtains a patent, he is required by the law to have marked on it that the article is patented. His letters patent are of record here, just as our title deeds to real estate are recorded in the proper offices.

There is no such thing as a *bona fide* purchaser of a patented article without notice that it is patented. If the mark of patent right is on the thing, the man who buys it with his eyes open cannot be an innocent purchaser against the right of the patentee.

Again, that declares if he buys it for his personal use he may infringe it in any way whatever and not be liable. He may buy an article to use it personally, and put men all over the country to manufacture it, and yet not be liable in damages, because he was an innocent purchaser without notice.

The next paragraph of that section declares that no person who shall in good faith purchase, use, manufacture, or sell, without previous knowledge of the existence of a patent therefor, any article, machine, machinery, or other thing for the exclusive use, sale, or manufacture of which any patent has been or hereafter may be granted to any person, persons, or corporation whatever, shall be liable, in damages or otherwise, for an infringement of such patent until after written notice of the existence thereof shall have been personally served, etc.

All a scoundrel has to do is to infringe a patent, and run faster than the marshal. The greater the rascal and the better the racer are all the tests whether there can be recovery. He is a witness in court. He can swear to his good faith, after he is caught; before he is caught he will not be liable at all, because he is liable under the bill only for damages occurring after personal service of notice of his wrong.

In my section of the country there are very few patentees. We have but little enough concern, care little for them in any such sense as that. And if I were seeking to place myself upon the side which the gentleman from Illinois calls the "masses," I would go in for depriving patentees of their constitutional right. They are decidedly in the minority. But I understand that the same good faith, that the same high consideration, which should actuate us in keeping treaties with foreign nations, ought, with double force, to compel us to keep constitutional contracts with our own fellow citizens. For these reasons I hope this bill will not pass.

SPEECH OF THE HON. BENJAMIN BUTTERWORTH OF CINCINNATI, O.

MR. SPEAKER: I submit if ever there was a bald attempt to kill the goose that lays the golden egg, this is such an attempt. The industries of this country depend for their origin and growth more upon the encouragement given to the inventor by our patent system than upon every other influence and all other causes combined. It is due to our patent system that we to-day excel all others as a manufacturing nation. This bill practically "wipes out" our patent system; and, as my honored friend on the left [Mr. Hammond] said, while it may leave in a degree unimpaired some monopolies, if such a thing as a monopoly can in fairness be said to exist in this country—and there is what is near allied to a monopoly—while the provisions of this bill leave them unharmed, they at the same time not only leave unprotected, but practically confiscate, the property of thousands who by lives of thought and toil have laid the foundation of our magnificent industries. It legalizes the robbery of these, the most deserving and most numerous class of inventors.

As has well been said by the gentleman from Georgia [Mr. Hammond], not one in a thousand need be swindled unless he consents to be, and is in fact, conspicuously a party to it. The law requires that each patented article shall be so stamped, including the date of the patent, that no one need be imposed upon if he exercises care. It is true there may be devices covered by patents which are parts of a machine and so located as not to be observable, but these are rare exceptions, and fraud or imposition in such cases is unheard of. Every intelligent person knows that under every system of laws, however perfect, some hardships will result. It is impossible to conceive of a system so perfect as to be free from hardships in individual cases, and our patent laws, in their practical operations, may, in isolated instances, be the instrument of wrong and frequently of annoyance; but compared with the inestimable blessings the patent laws, as administered, confer with lavish hand upon all our people, the inconveniences a few may suffer are as nothing, and certainly can offer no semblance of justification for the wholesale confiscation of property in patents that would result from the enactment of such a law as is here proposed. What does this bill propose? To take away the remedy in case of trespass upon and injury to the class of property created by our patent laws. It in effect authorizes A to appropriate to himself the property of B, without compensation and without redress. The right is left, the remedy taken away.

In my judgment, this bill could not be more offensive to justice unless it literally legalized the calling of the footpad, and afforded immunity to pickpockets; since it must be evident that the acts named differ from those permitted by this bill only in this, that the footpad places the victim under duress before he robs him, while this bill authorizes the appropriation of the property of another without violence, and leaves the victim without remedy and without redress. In each case the victim loses his property; but in case the footpad takes it, it may be recovered, but the individual who is robbed under the provisions of this bill is remediless.

Not to exceed 10 per cent of the patents issued by the Government of the United States prove valuable to

the patentee. Why? Because the larger per cent of patented machines and devices mark so slight an improvement, although an important improvement, in the art that the inventor is unable to reap substantial profits. Nevertheless, each improvement marks an advanced step in the art to which it belongs; and while it is usually the men who make great strides, extraordinary improvements, in an art who realize great profits, yet it is the seemingly less important improvements that have built up and made prosperous the vast and various industries of our country.

The bill has for its manifest object to deprive the honest inventor, whose labors have added to the well-being of the whole people, of his remedy to recover from the person who has willfully and knowingly taken from him his property, that which the Constitution and the laws of the country say shall be his property for a term of years. I say you prevent his recovering from the man who willfully and in violation of the Constitution and the laws of the country takes possession of his property and converts it to his own uses. Pass this bill, and you authorize every man to seize upon and convert to his own use the property of his neighbor. The product of the brain and hands of one of our citizens—if it is a new and useful improvement in any art—is by law property as much as a horse or cow; and the offense of taking the one without compensation is as great as taking the other, and is in conscience, and should be in law, as censurable.

This bill, if it should become a law, wipes out at one stroke of the pen property rights of more than one hundred millions of dollars in value. It is, in fact, impossible to calculate the mischief it will do. Ninety per cent of the present thriving industries of the country are built upon inventions covered by patents. "But then," says some friend, "we are being robbed by the system."

Mr. Speaker, I can show you, can demonstrate, that instead of that being true, this system has cheapened every product that is used in the house, in the barn, in the field, in the mill, in the shop, the forest, the factory, and on the ocean. It has cheapened all the articles we use. Instead of imposing burdens, it has scattered blessings, and this covert attempt to steal the blessings while destroying the source from whence they proceed is utterly indefensible. I wish I had time to examine this bill in detail in order to show its enormities.

[Here the hammer fell.]

A Golden Nugget.

A COMFORTABLE LITTLE FORTUNE ALL IN ONE CHUNK.

There is at present on exhibition in Wells, Fargo & Co.'s bank at San Francisco a bit of auriferous rock that any individual might be glad to possess. It might be a little cumbersome as a "specimen" scarfpin, but when the wearer reflected that it was worth between \$6,000 and \$7,000, he might be braced up to making the extra exertion. The nugget is one of the finest ever unearthed in California, both in size and richness. It is irregular in shape, and about the size of an ordinary Derby hat. That there is very little rock and a great deal of gold in it may be determined by its weight, which is 35 pounds troy. Quartz of this sort is usually valued at \$200 per pound, and, allowing the large margin of \$1,000 for rock, the nugget would be worth \$6,000. The exposed rock and great gobs of gold that hang out of its sides so as to nearly hide all other composition, and make it appear almost as melted metal, are not jagged or rough, but, on the contrary, are smooth and polished in a manner that only water is capable of. The proprietors of the nugget are Messrs. Hayes & Steeleman, of Sierra City, and they have left it on exhibition for a few days before disposing of it. At the bank it attracts much attention, but the employes could furnish no information concerning it beyond that it came from Sierra County and near Sierra.—*San Francisco Examiner*.

Preservation of Wood by Lime.

I have for many years been in the habit of preparing home-grown timber of the inferior sorts of fir—Scotch, spruce, and silver—by steeping it in a tank (that is, a hole dug in clay or peat, which was fairly watertight) in a saturated solution of lime. Its effect on the sapwood is to so harden it and fill the pores that it perfectly resists the attacks of the little wood-boring beetle, and makes it, in fact, equally as durable as the made wood. I have a mill which was looted with Scotch fir prepared in this way in 1850, and it is in perfect preservation. The timber is packed as closely as it will lie in the tank, water is let in, and unslaked lime is thrown on the top and well stirred about. There is no danger that the solution will not find its way to everything in the tank. I leave the wood in the solution from two to three months, by the end of which time an inch board will be fully permeated by it. Joists and beams would, of course, take a longer time for saturation; but in practice we find that the protection afforded by two to three months' steeping is sufficient if the scantlings are cut to the sizes at which they are to be used.—*Field*.