

Scientific American.

ESTABLISHED 1845.

MUNN & CO., Editors and Proprietors.

PUBLISHED WEEKLY AT

NO. 37 PARK ROW, NEW YORK.

O. D. MUNN.

A. E. BEACH.

TERMS FOR THE SCIENTIFIC AMERICAN.

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NEW YORK, SATURDAY, JANUARY 17, 1880.

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PATENT LEGISLATORS IN CONGRESS.

Last winter the enemies of inventors and patentees achieved a signal defeat in a general attack upon the patent system. Profiting by that experience, which taught them the futility of attempting by direct assault the destruction of a system so firmly grounded in popular esteem, they have scattered their forces this year for a sort of guerilla warfare, apparently hoping to do indirectly, under the guise of protection to oppressed grangers and the like, the work they failed to do a year ago.

We have before us four bills which prettily illustrate the spirit and the method of the guerilla system. They have been introduced in the House of Representatives by Mr. Baker and Mr. Colerick, of Indiana, and Mr. Converse, of Ohio, and are numbered respectively 2,631, 2,633, 2,913, and 3,049.

Of these Mr. Baker is sponsor for two. The first is designed to regulate the costs of suit in actions to recover damages for the infringement of patents; and provides that in cases where it shall appear that the defendant purchased in good faith and without actual knowledge of infringement, and applied the article to and for his own use and not for sale or for manufacturing a product for sale, if the plaintiff shall not recover a judgment in damages of twenty dollars or over, the court shall adjudge that he pay all the costs of suit, including a reasonable attorney's fee to the defendant; and if the plaintiff shall not recover a judgment in damages of fifty dollars, or over, the court shall adjudge that he pay all the costs of suit.

The propriety of thus punishing the patentee for defending his property rights will be apparent to all who desire to appropriate his property to their own use. The justice of such discrimination in favor of offenders against patent rights solely, however, may fairly be disputed by all the other classes of thieves and plunderers and receivers of stolen property.

Properly named, the bill would be entitled "a bill to facilitate the infringement of patent rights, and to encourage patent litigation." Since a very large portion of all patented articles and processes are intended for individual use, and not for the manufacture of articles for sale, and since damages for individual misappropriation in such cases are apt to be small, the infringer has everything to gain and nothing to lose in standing suit, while the inventor is bound to sue or practically abandon his rights.

But the advantage thus aimed at is not enough to suit Mr. Baker or his employers. Accordingly he hands in another bill to limit the liability of purchasers to actions for damages in cases of infringements. This bill is short enough to quote entire. It provides "that no suit shall be brought or maintained in any court having jurisdiction in patent cases for any alleged infringement of any patented article, device, process, invention, or discovery, where it shall appear that the defendant, or any person through or from whom he derives title thereto, purchased the same in good faith from the manufacturer thereof, or from any person or firm engaged in the open sale or practical application thereof, and applied the same to and for his own use, and not for sale, nor for manufacturing a product for sale."

Mr. Colerick's bill aims at the same point, and provides that purchase in good faith without knowledge that the purchased article was an infringement of any patent shall be a complete defense against action for damages.

In their best aspect these bills are an attempt to make the United States Courts a sort of patent buffer to guard the purchasers of illegal articles, or articles to which the seller has no title, from the natural and proper consequence of their ignorance and folly. The propriety of thus discriminating in favor of one phase of business imbecility and against one particular class of property owners is as little apparent as is the need of it. The proper way for the complaining farmers to protect themselves against patent swindlers is to buy patent rights and alleged patented articles as they do horses and lands and other property, only after making sure that the seller's title is good. If they will take the risk of buying blindly let them abide the issue manfully, and not call upon Congress to throw the consequences of their folly upon the shoulders of rightful owners who have had no part in the fraudulent sale.

But these bills present a much less tolerable aspect. Ostensibly they are put forth to meet a special class of cases in which innocent farmers are said to be the victims of patent sharps. Really, we believe, they are intended to break down the defenses by which inventors are now enabled to guard their constitutional rights under the patent laws; and in case they are passed they certainly will have the effect to destroy absolutely and utterly the value of a large class of patent rights.

For example: A, in Maine, invents and patents a device calculated to lessen the cost or increase the safety of railway construction or operation. The foreman of a railway company's shops in Indiana offers the invention as his own to the company which employs him. They buy it and use it. In course of time the inventor hears of the infringement and brings suit. After such delays and multiplications of court expenses, as powerful corporations are so well able to effect, the case comes to trial and the defendants raise the plea that the purchase was made in good faith, for their own use, and not for sale or for manufacturing a product for sale. The defense is complete; the plaintiff gets no damages, and besides suffering the loss incident to the invasion of his rights he has to pay all the costs of the suit and a "reasonable"

fee to the railway company's attorney. An admirable issue, truly, for a patent law designed for the advancement of the useful arts, by the encouragement of inventors!

But Messrs. Baker and Colerick are mere bushwhackers compared with Mr. Converse. The latter gentleman enters the lines of the patent defenders, ostensibly in friendship, and quietly drops a match into the magazine, hoping thereby to blow up the entire system. In this way:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That it shall be unlawful for any owner, or part owner, or assignee of the whole or any part of any patent granted or pending under the laws of the United States to charge or receive as royalty on such invention or discovery more than an amount equal to the cost of production, and twenty-five per centum to be added thereto for profits of manufacture in addition to such cost, and twenty-five per centum profit. Whenever the invention or discovery or the article patented, or when patent is applied for, is used for hire instead of being sold, it shall be unlawful to charge or receive for such use more than the royalty, cost, and profit of manufacture aforesaid. Every owner or part owner, by assignment or otherwise, of any patent heretofore or which may hereafter be granted, or for which application is pending under the laws of the United States, shall forfeit to the public all right to said discovery or invention."

That is all; and it is certainly quite enough. At first sight it may seem as though some specific offense should have been named in the final clause. But that is not at all necessary. The act of applying for a patent for an invention is offense enough, in the eyes of men like Mr. Converse and his anti-patent associates, to justify the forfeiture of all right to the invention; and Mr. Converse is to be commended for frankly and boldly stating precisely what the would-be patent law amenders are driving at.

A NEW DEEP SEA SOUNDING APPARATUS.

We have received from the author, Sr. Henrique de Lima e Cunha, a copy of a paper recently read by him before the Lisbon Academy of Sciences on the subject of a new deep sea sounding apparatus devised by him, and which appears to have some valuable features, in addition to possessing the merit of novelty. In taking soundings at great depths, and in places where there are strong undercurrents, no very great exactitude can be attained by ordinary methods, owing to the fact that the line is carried off by the undertow, and the length paid out does not represent the vertical distance to which the weight has descended. The apparatus under consideration is based on the effects of atmospheric pressure. It consists of a cone of sheet copper, having for its base a diaphragm of the same metal, and which screws into the bottom of the cone so that it may be readily removed when necessary. In this movable base there are six small holes, one millimeter in diameter, which allow the ingress of the sea to the interior of the cone; and to the center of its upper surface there is soldered a vertical wire of pure silver, two millimeters in diameter, and which occupies the axis of the cone.

To prepare the apparatus for use the silver wire is moistened with nitric acid, which results in the production of a thin film of nitrate of silver. The base being screwed on, the cone is suspended by means of a ring at its apex, and sunk by means of two separate weights or stones suspended by cords or chains depending from three rings attached to the perimeter of the cone. To insure a vertical position to the apparatus and to prevent it from being easily turned from its course, a small float is attached just above the suspension ring at the apex of the cone. As the apparatus sinks into the sea the water penetrates into it through the orifices in the diaphragm and gradually rises in proportion as the pressure increases during the descent. The salt water acts on the thin coating of nitrate of silver on the wire, and turns it perfectly white by the production of chloride of silver as far as immersion has taken place. By this means, therefore, is determined to what height the water has risen in the cone, and consequently what the pressure has been; and from these data the depth to which the instrument has descended is easily determined by simple formulæ. The author suggests that by suspending the lower weight by means of an apparatus which would detach it on striking bottom, the apparatus would ascend to the surface of itself, thus dispensing with the use of a line.

PROSPECTS OF TRADE IN BRAZIL.

The picture of a sturdy negro carrying a wheelbarrow on his head would not be a bad symbol of the force of custom which, in an infinite variety of ways, labor-saving inventions have to overcome in most parts of the world. Our consul general at Rio Janeiro says in his recent annual report that a negro so employed had lately been seen by him in the streets of that city. The rarity of good roads in tropical countries has led to a general custom of carrying burdens on the head; and even with good wheeling provided the handy wheelbarrow was to the Brazilian porter only so much additional burden.

The overcoming of such deep-rooted and stupidly-followed customs is one of the main tasks to be performed in building up any considerable trade with foreign, more especially tropical countries. For this work the commercial agent and the manufacturer as well needs know by personal study what are the customs of the people he wishes to trade with, how to adapt his wares with the least change to meet their wants, and to avoid sending wares which cannot by any possibility be made available.

In the report referred to Mr. Adamson says that his office is inundated with letters of inquiry, many of them asking