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, APRIL 3, 1886.

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SCIENTIFIC AMERICAN SUPPLEMENT

No. 585

For the Week Ending April 3, 1886.

Price 10 cents. For sale by all newsdealers.

THE PATENT BILLS BEFORE CONGRESS.

A large number of bills are now before Congress, designed to modify the existing patent laws. Regarded as a whole, the most notable point concerning them is their diversity of purpose, which appears to have been determined, more or less, by local prejudice or the degree of popular enlightenment in the district or State whence the bill originated. Among them are bills for the nullification of the patent laws; for depriving the inventor of the right to sue infringers; for giving all purchasers exemption from damages, if they infringe; for the purchase of patents by the Government; for limiting the amount of profits the inventor shall make from his patent; for extinguishing patents by money payments from the Treasury to inventors of valuable new inventions; for reducing the term of patents from seventeen to seven years; for depriving inventors or their assigns of their patents, if they attempt to hinder others from manufacturing the same; for compelling patentees to give bonds, if they bring suits; for infringement; for securing to those who buy an infringing device, the free right of use; for perpetuating testimony, reducing time for suits, etc.—these are among the proposed enactments adverse to inventors.

To encourage and benefit the inventors there are bills for extending the designs patent law; for extending the trade-mark law; for extending the benefits of the copyright law to foreigners; for preventing the sale of patent rights for debt; for preventing old foreign inventions from being patented here; for reviving and extending all old expired patents, and existing patents, so that a new term of eight years shall be now enjoyed; for extending the jurisdiction of the Circuit Court and facilitating patentees in recovering compensation for the use by Government of their patents; for the grant of patents for new flowers, fruits, horticultural and agricultural improvements; for the appointment of a commission to find out and report what changes are required in the patent laws—cost therefor, twenty-five thousand dollars; for the establishment of a Patent Court in Washington as an adjunct to the Patent Office, with clerks, deputies, bailiffs, etc., at a cost of many thousand dollars; for extending the jurisdiction of the Court of Claims to patent cases.

We have not space at this time to go into the particulars of all these bills, but shall hereafter refer to several of them, as they contain interesting and novel features.

For the present, let us look at Senate bill 1,511, introduced by the Hon. James Z. George, Senator from Mississippi. Its first section, of twelve lines, provides that any person who in good faith shall buy a patented article without notice that the same was covered by a patent, or without notice that the seller had no right to sell such article, shall thereby become the absolute owner, and no subsequent notice that the seller was not the lawful owner shall in any way impair the right of such purchaser as absolute owner.

If this bill is enacted into law, a man who buys stolen property—a patented wagon, for example—will become the absolute owner, the *bona-fide* proprietor will be debarred from recovering his property, and the lawful patentee will be done out of his royalty fee. It is not often that three such glaring outrages on justice are packed within so brief a legislative proposition. The bill perhaps represents the Mississippian idea on patents, but it is not very encouraging to honest industry and invention.

The second section of the same bill provides that all patents hereafter granted shall be subject to purchase by Congress, for the use of the people of the United States, at such reasonable valuation and terms as may be provided for by law.

This section seems superfluous in view of the first section; besides, Congress may at any time authorize the purchase of patents, and has frequently done so.

House bill 5,925, introduced by the Hon. Charles B. Lore, of Delaware, is intended to repeal all the present patent laws and establish another system of rewards for inventors. It provides that a patent shall be granted for one year only; the patent shall be submitted by the Commissioner of Patents to a committee of experts, who shall decide, finally, whether the invention is valuable or not. If found of no value, the inventor gets nothing, and goes to grass. If the Expert Committee find the invention of worth, they decide upon the cash value of the invention, which shall in no case exceed two hundred thousand dollars, and from that sum down, to be paid out of the Treasury by warrant of the Commissioner of Patents, the award to be final.

The Expert Committee would have a very delicate duty to perform in fixing the cash valuations, and they would constantly be subjected to risks and probabilities of making egregious errors. For instance, if they were to allow $10,000 as the value of the patent for the thread placed in the crease of an envelope to facilitate opening of the same, how much ought they to allow for the second patent, that was granted for the little knot that was tied on the end of the thread, so the finger nail could easily hold the thread?

Then, again, how much ought the committee allow for a simple device like the patent umbrella thimble slide, a single bit of brass tubing that costs a cent and a quarter to make? Probably the committee would think that one thousand dollars would be a most generous allowance, while two hundred thousand dollars—the limit of the bill—would, of course, be regarded as a monstrous and dishonest valuation. But the real truth is, the patent for this device is actually worth nearer one million dollars than two hundred thousand. The inventor, Dr. John J. Higgins, of this city, has already received over one hundred thousand dollars cash in royalties for his patents, and probably will receive three times that sum before they expire; while his licensees, the umbrella makers, are supposed to have already realized a million dollars' profits directly or indirectly arising from the control of this little article. Few people have an idea of the extent of the umbrella trade. In this city alone there is scarcely an umbrella manufacturing concern of any account that turns out less than two thousand umbrellas per diem.

We have not space to consider the valuations which other and greater inventions should probably receive, such as the harvester, the sewing machine, the printing press, the telegraph. The limit of compensation fixed by the bill would be far inadequate for such improvements.

As a means of getting rid of the surplus income of the Government, the bill in question is admirable. It beats the pension schemes, river and harbor steals, the land grabs, and Congressional private secretaryships all out. But the bill, as it stands, is full of difficulties, and likely to give rise to endless disputes and tergiversations, to overcome which and satisfy everybody, we advise Mr. Lore to amend his little bill as follows: First, grant patents and copyrights, free of charge, to all applicants; and second, the holder of any patent or copyright, on presenting to the Patent Commissioner a full assignment thereof, shall receive five thousand silver dollars, redeemable in gold.

ROOTS' BLOWING AND PUMPING MACHINERY.

A notable example of the world-wide appreciation of good machinery is seen in the remarkable progress made by P. H. & F. M. Roots, of Connersville, Ind., in the manufacture and development of their blowing and pumping devices. These machines now have an international reputation. They are in operation in every part of the globe, and are generally recognized by engineers as standards of mechanical excellence in the lines to which they belong. Some idea of the high esteem in which these machines are held in England will be gained from the recent illustrated article published in the *Engineer*, which we give in another column.

How Coal Made the "Bad Lands."

The "Bad Lands" of Dakota are said to owe their origin to the burning of the coal deposits that once existed there. They are situated principally along the Cheyenne and Grand rivers and the Little Missouri. They are from two or three miles to, say, twenty-five miles in width. In the long ago, the valleys of these streams must have been filled with drift wood. Then followed a period of drift, which buried the accumulation of wood under two or three hundred feet of sediment, sand, and gravel. The buried wood in time became coal, the veins being in some instances twenty odd feet in depth. Either from spontaneous combustion or from electricity, fires were started in these veins, and they gradually burned out, restoring in part the old water courses by means of the overflow from the accumulation of water in these newly formed basins. Looking upon them, here you see patches of slag, there great bowlders, showing unmistakable evidences of great heat, and on every hand scoria or burned clay, resembling broken brick. Where the fires were checked by the caving earth and the coal did not burn, mounds two or three hundred feet in height stand.

And according to the *Black Diamond*, a newspaper devoted to the coal interests, published in Chicago, in parts of Wyoming the same process is now going on; vast fields are undermined by subterranean fires, and the blackened, smoking plain is filled with desolation. Trappers say these fires have been in existence for a long time, and the traditions of the Indians point to the same conclusion.

Lack of Heat.

In the Superior Court of Massachussetts, in an action for rent against the tenant of rooms in an apartment house, it appeared that the steam heat which the landlord agreed to supply was inadequate; that additional heat became essential to a proper enjoyment of the premises; that the flues and chimneys were defective, or improperly constructed; that her apartments were often filled with dense smoke; and that the elevator service was inefficient. The court held that these grievances were an obstruction to the beneficial enjoyment of the premises, constituting a constructive eviction, and justified the tenant's abandonment.