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Patent Plotters and Congress.

The granting of special privileges by legislation against well established principles of public policy, is deeply injurious to the interests of any country, but more especially a republic. The legislation of a republic is broad and open, and in this age of light and reason, nothing can be hid from public scrutiny. Monopolies are opposed to the spirit of free institutions, consequently every monopoly grant, no matter upon what pretence, unless it can be shown that it is for the public good, or as an act of justice, is sure, sooner or later, to work mischief, and redound upon the heads of those who unwisely forget their duties and obligations to their country and constituents. At the present moment there is imminent danger of our Congress being influenced by a powerful combination of individuals, who, under the pretence of justice to inventors, are endeavoring to obtain special grants for the extension of certain patents, in violation of existing statutes.

The patent law provides for extending a patent for seven years beyond the period of its original term of fourteen years, in every case where the inventor has not been sufficiently remunerated. All applications for such extensions are made to the Commissioner of Patents, accompanied by certified documents, showing the profits and the losses of the patentee. In every case, when it appears to the Commissioner that an inventor has not been fully remunerated for his invention during its first term, a renewal for seven years longer is granted, but if the evidence presented shows that the inventor has received sufficient compensation, the Commissioner cannot grant the renewal without violating the provisions of the Patent Law. Guided by this principle of law, Commissioner Mason refused to extend the patent of Col. Colt, and his decision in this case (which we publish on another page) is a document characterized by sound reasoning and upright feeling. This decision, substantiated by such incontrovertible arguments, every candid person will think, should have arrested any further attempts to obtain an extension of this patent; but such is not the case. The owners of this patent, and also the owners of two or three others, who, for the same reasons, could not obtain an extension of them by the plain path of established law,—we are credibly informed, are now besieging Congress for special grants, and it is seriously apprehended that they will accomplish their desires. Money is lavished freely in every way to exercise an influence in favor of the applicants, and as they are abundantly able to expend enormous sums in forwarding their designs, it is not unlikely that they may be ultimately successful. There never was a time since the first American Congress assembled, when such combinations and influences were brought to bear upon Congress for granting the extension of so many patents by special laws.

Applications have been or are about to be made for the renewal of seven or eight patents—such as Colt's (last) for revolving fire-arms; the india rubber patent of Hayward; Hoe's Printing Press; McCormick's Reaper, and others. None of these patents can be extended by the plain path of existing law, and the extension of the two former has been denied by respective Commissioners of Patents, after careful and candid examinations of submitted testimony. It looks more than impudent for these parties to seek to gain by special legislation that which they could not obtain in the manner provided by common statute. Will Congress violate the established principles of public policy, and grant the extension of these patents? It surely cannot be possible. If these patents are extended, a stain will be made on the character of our present Congress which can never be effaced. Let our Senators and Representatives look well to this matter before they vote for the extension of these patents.

We have no doubt but there may be some deserving cases—some inventors to whom Congress, in justice, may grant, with the approba-

tion of our country, extensions of their patents: these must be judged of on their special merits. We are the advocates of the rights of inventors and those of the people, and these are not incompatible with one another. We only oppose all monopolies when we know they are sought to be obtained for other purposes than a fair remuneration to inventors.

Interested parties in the Woodworth Patent, we have been informed, are working at Washington upon a system for which they have always been distinguished, namely—great craftiness and deep subtlety. Fearing that it would be in vain to apply again for an extension of the Woodworth patent, they have arranged matters in such a manner as to seek to obtain the extension of the old Emmons' Patent, so as to use it for their own benefit and secure all the privileges they enjoy under the Woodworth patent. The patent of Emmons was for the very same invention as that of Woodworth, and the interested parties of the Woodworth patent have heretofore accused Emmons of falsifying himself, and have even resorted to employing his dying confession—as they say—to subserve their purposes. Now Emmons, by the same parties, is to be represented as an injured man, an ill-used benefactor to his country, and the extension of his patent is sought for ostensibly (as an act of justice to his relatives, but really to be used for the advantage of those who were his calumniators and detractors. We are loth to believe that this scheme, deep and cunning as it is, can be successful with Congress.

It is calculated that patent rights to the value of \$20,000,000 are sought to be extended by the present Congress, and all those interested in these cases, support and encourage one another with a power and influence never before exerted in Washington. They may be successful in their designs, as they will leave no effort untried to accomplish their objects. The credit of rejecting, or the dishonor of granting such special privileges will belong to Congress. We sincerely hope that the honor of Congress will not be sacrificed by those who have it in their keeping, for the sake of any party or combination whatever; but certainly there is danger, unless the constituents of the Members exert their influence by protesting actively against such measures. We would recommend to our readers the propriety of their addressing letters to the Members of Congress from their respective districts, remonstrating against the enactment of such laws as will perpetuate these overgrown monopolies—the managers of which have become sufficiently fat from their proceeds already.

Candles Made from Minerals and Turf.

If all the reports which have come to us recently from abroad, with respect to new discoveries in making candles, are true, all our whaling ships will soon be laid up in port, or converted into coal grinders. In London beautiful wax-like candles have been made for years from palm oil; nothing of the kind has as yet, we believe, been made in our country. But more recently, new discoveries have been made, by which candles are now manufactured in Scotland from coal, and in Ireland from peat bogs, so there is every prospect of the palm oil trade being as clearly destroyed as is the whaling trade of England—which was once very extensive, but is now reduced, we believe, to four or five ships. In Scotland the "Edinburgh Witness" states that there is a quarry about twelve miles to the west of Edinburgh, in the immediate neighborhood of a picturesque group of trap-rocks, known as the Binny Crag, which quarry itself is of white sandstone, but there rests immediately above it a thick bed of dark-colored shale, over which the hot trap must of old have flowed, and which was subjected in consequence, to a sort of natural distillation. The distilled substance, shut very closely up, found its way into the vertical crevices of the bed of a white stone beneath, and in these crevices the quarriers now find it. It exists as a light waxy matter, varying in color in the mass from that of gamboge to that of dark amber, melts at nearly the same temperature as bees' wax, which it equals in hardness, and burns with a bright flame. Many years ago the quarriers employed at the work, struck by its peculiar qualities, learned to convert it

into very dark-colored candles, which, though rather smoky, gave a not bad light, and which were occasionally purchased from them as objects of curiosity, but much oftener consumed in their cottages.

A few years ago, however, some one thought of distilling shales, and the result has been that some of them are exceedingly rich in an inflammable substance, resolvable into gas and tar, and which, from the paucity of its chemical affinities, has received the name of paraffine. Of this substance, beautiful candles are made, in no degree inferior to those of wax.

Our readers will also remember the account of the famous lawsuit which we published on page 10, this volume, "Scientific American," about what was coal and was not coal, and how so many eminent chemists held contrary opinions on the subject. From that particular coal then in dispute, beautiful candles are now being made, as well as from the shales of Binny Crag. From every ton of coal, naphtha and paraffine to the value of \$28 can be extracted, and from the paraffine snow white candles are manufactured for use and sale.

In Ireland there are extensive peat bogs, which from time immemorial have supplied the people with fuel. The peat is from 12 to 24 feet deep, and is a soft spongy mass, of a brown color near the surface, increasing in blackness and compactness, as it descends. If these bogs were suddenly submerged and subjected to severe superincumbent pressure, they would form coal beds. The turfs are cut into the form of bricks, and set up to dry in the sun, and when so dried are used for fuel like our coals, only they are all burned in grates, or else in piles on the middle of the floors of the wretched peasants' huts, the only chimneys being holes in the roofs.

These bogs cover no less than 2,900,000 acres of Ireland, and are exceedingly dreary and desert-like wastes.

A company has been formed and a manufactory is now in operation to render these waste places profitable, and to make candles from the deep black, spongy peat. This manufactory is situated near Athy, in the County of Kildare, and is erected at the verge of a great bog twelve miles long. The peat is cut in the bog and carted to the factory, where it is thrown into huge retorts and there distilled, the volatile products being condensed in a vessel which has a capacity of 8,000,000 cubic feet. From 100 tons of peat, as much tar is extracted as yields 350 lbs. of paraffine, and 300 gallons oil. The paraffine is obtained from the tar by boiling the latter for an hour, in water containing 3 per cent. of strong sulphuric acid, when the acid unites with the tar and falls to the bottom, separating it from the paraffine, which is left along with the oil. The liquid is then re-distilled, and the paraffine obtained in flaky cakes of a blackish color. These are then bleached with chlorine gas, then steamed and pressed into cakes, and afterwards made into beautiful white candles. Other valuable products besides the paraffine, are obtained from the peat, as the small quantity of paraffine realized from such a great mass of peat would not cover all the expenses. Thus it is that science is continually advancing the arts, and extending the dominion of man, for useful purposes, over the rocks, as well as the waters. We now cook our food, we heat our houses, and we obtain our light from minerals, long hid in the bosom of the earth, and once supposed to be as useless as the black mica formations of New York, which are employed for no useful purpose whatever.

The Prizes Again.

If we had delayed until the 3rd day of January before awarding the Prizes for the largest lists of subscribers, some of the successful competitors would have been doomed to disappointment. We, however, complied strictly with the proposition advanced at the beginning, and closed the lists on Saturday the 31st ultimo. Owing to the detention of the mails by the heavy snows, our letters were delayed several days—for example, a letter mailed at Fitchburg, Mass., Dec. 29th, did not reach us until the 3rd inst.—we should have had it the next morning after mailing. The result is, that one of the competitors increased his list sufficiently to have entitled him to the fifth prize, instead of the

eighth, as published last week; and two others sufficiently to have entitled them to prizes otherwise awarded.

Under these peculiar circumstances we find a very agreeable duty imposed upon us—the only one which we feel willing to pursue. Without attempting to change the awards, as published last week, we will pay over the same amount that each of the following would have been entitled to had their letters reached us in due season:—

D. M. Sechler, of Ironton, Ohio, having sent 75 names, is awarded \$40, instead of \$25, as announced.

Charles Burleigh, of Fitchburg, Mass., having sent 65 names, is awarded \$20.

John Boyd, of Xenia, Ohio, having sent 57 names, is awarded \$10.

In pursuing this course our Prize List is increased to \$500, instead of \$450, but we feel confident that it will readily meet the approbation of our friends and secure a most perfect understanding.

The Water Ram.

We give the following extract of a letter as the text:—

"At a meeting of the Farmers' Club last summer you stated that a person in New Jersey had so arranged a watering ram (where there was no natural fall of water) that it threw water at a considerable distance on his farm, and referred to it as showing how an artificial stream could be made where no natural fall existed."

That we have seen done in several instances. Take any place that is naturally wet, and lay down under drains until you accumulate water enough at the outlet, which is easily done, to drive a water ram, and you can send one-eighth of the stream any distance you please through lead pipes, rising twenty feet to every foot fall.

Water rams can be set at any spring or stream where there is a fall, and will give a constant stream at the house on the hill, a mile from the spring and a hundred feet above.—[N. Y. Tribune 29th Dec.

[The idea conveyed by the above is, that upon a perfectly dead level—a ditch in a swamp for example—where water can be accumulated one foot deep, it will throw one-eighth of that quantity through three hundred or a thousand feet of pipe to the height of 20 feet. A water ram will not operate unless there is a natural fall—an inclined plane. The factory canal at Cohoes, N. Y., is an artificial work, but the fall is no less natural (what is an unnatural fall.)—If one foot of water can throw one-eighth of its volume 20 feet high, then the result produced is to the cause as 156:20 is to 62.5 without allowing for friction. There are 62.5 lbs. in a cubic foot; the eighth of that is 7.81 × 20 = 156.20. What is this but perpetual motion. A water ram theoretically will throw one-twentieth of the water from the reservoir 20 feet high, for each foot of fall, and no more.

The last paragraph in the above is also wrong. A water ram cannot be set at any spring or stream where there is a fall, to throw a constant stream through a mile of pipe, to the top of a hill 100 feet high. The capacity of every water ram is circumscribed by the height of the fall and the quantity of water which flows into it in a given time.

Fresh Isabella Grapes in January.

We are indebted to Geo. Clapp, Esq., of Auburn, N. Y., for a box of delicious Isabella grapes, raised from his grapery last season, and preserved in cotton up to this time. The specimens sent us were as fresh and retained their flavor as perfectly as though just plucked from the vine. It may interest some of our readers to know the process by which they were preserved, which was simply by placing the clusters between layers of cotton, in a box, until it was full, and then covering it, to exclude the air as much as possible.

Patent Extension—New Rule.

In all cases of application for the extension of a patent, the applicant must file his statement of the ascertained value of his invention, and of his receipts and expenditures, as required by law, within thirty days after the date of the first publication of the notice of such application. C. MASON, Commissioner.

Patent Office, 30th Dec., 1853.