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THE PROPOSED HALF MILLION GRAB.

As Congress has now assembled, and in view of the extraordinary influence which will be brought to bear upon that body to obtain a large appropriation in order to cover the expenses of American Commissioners and exhibitors to the Vienna Exposition, we deem it advisable to present a recapitulation of the various objections which we have urged against such proceeding, and also a brief review of the facts regarding the Austrian patent laws and similar enactments of other European countries, the condition of which forms the basis of our opposition. The reader will therefore find in the following a succinct *resumé* of the various arguments which we have from time to time advanced, and from which, in connection with the published and opposite views of the United States Commissioner, General Van Buren, an intelligent idea of the controversy may be obtained.

According to the rulings of the Austrian patent law, patents in that country must be worked within one year of their date of issue; working before application for a patent, or between the dates of application and issue, is not a compliance with the law. Not only the device but all its parts must be made in Austria and sworn to be in exact conformity with the drawings and specifications filed. There is no provision whereby a suit may be terminated. The infringer, after the case is completed and he finds himself beaten, has only to assert that the inventor has not properly proved his working. The suit is then re-opened, and the same ground gone over, and this can be done as often as the infringer chooses, during the whole life of the patent. If an inventor allows two years to pass after working his patent the first year, without manufacturing it again, his letters become void. As regards the practical working of the above regulations, we have presented sundry communications from American inventors in Austria tending to show that Americans have never succeeded in getting a favorable decision in that country, and detailing individual experience, proving that so far from the government supporting the injured party, it actually seeks means to aid the infringer in his piracy.

Not only are the Austrian laws thus oppressive, but the regulations of adjacent European countries are equally unjust. We note in English journals repeated complaints of the unlawful seizure of patented articles displayed in the Paris Exposition of 1867, and we find it stated that inventions supposed to be protected by a special certificate, in that Exhibition, have been patented by Continental people. That the facts of the case are fully appreciated in England is proved both by the warnings of the press and the appropriation by Parliament of but £6,000 (\$30,000) to assist English representation. The practice under the Prussian law—the Austrian practice is little better—is strongly condemned in evidence given by Mr. Henry Bessemer, the great English steel manufacturer, before a Parliamentary committee. He states that, after disposing of the use of his process to Krupp, the German founder, the latter, according to law, applied to the Prussian Patent Office for a patent on the same. The authorities first declared the invention to be not new, then temporized for a long period and finally denied the application on the ground that a description of the process was published in the English Blue Book, which volume circulated in Prussia. Mr. Bessemer adds "that is universally the way in Prussia, unless it is some paltry thing, merely to keep up the appearance of granting patents, they give an occasional patent in that way, but they receive always the drawings, the fees and the description from the English patentee, which is published there for the benefit of the Prussians. . . Having obtained all the information from an English patentee, they make it public in their country, and then say it is not new." Other cases are on record where patents on inventions have been refused, and after the denial the government

has quietly proceeded to manufacture the articles. Especially is this true of military goods.

Under the existing patent law of Austria, a valid patent cannot be had if the invention is exhibited in Austria prior to the application for a patent. By a recent modification, the Director of the Exposition is empowered to except from the operation of the above clause such inventions as may be exhibited at the Exposition, and to grant a certificate to that effect in such cases as he chooses.

It is hardly necessary to say that, as a protective patent measure, this certificate is worthless. There is, therefore, plainly no ground for the assertions of the United States Commissioner that it is a patent or in any way operates as such. The most that it does is to fix a time during which an invention may be exhibited in Austria before being patented, and it then leaves the inventor to the tender mercies of the old and unaltered law. We therefore strongly deprecate any appropriation of the public funds in support of this great show business until Austria modifies its laws and consents to grant to our inventors the same enjoyment of their inventions in Austria as the subjects of that empire enjoy in the United States. In this country the Austrian inventor may obtain a patent even if his invention has been exhibited and manufactured for two years prior to his application for a patent; and our courts will defend and protect him from infringement, the same as if he were one of our own citizens.

From the consideration of this branch of the subject, we desire to direct attention to subordinate though cogent reasons why legislative assistance should be denied. We consider that an inventor or manufacturer in sending his goods for exhibition to Vienna does so in accordance with the views expressed by President Barnard in a late oration: that it will be a grand advertisement and ensure him a large profit. Unless it is to his direct advantage to make such a display, no inducement in the shape of partial assistance will cause him to expend the necessary time and trouble. Surely, then, it is manifestly unjust to devote the national money to the ends of private gain. For the relief of needy inventors having meritorious products to exhibit and being without funds to forward their desires, just exception might be made and discriminating enactments, private or otherwise, passed. But to manufacturers of our own products and of long known and tried devices, who incur no danger of infringement, pecuniary assistance should be denied, and they ought to be ashamed to ask it. Such refusal will not militate against a fair display of American products, as the same are largely manufactured abroad and will in any event be contributed by foreign exhibitors.

We have yet to refer to the especial labor of the United States Commissioner. This gentleman some time since voluntarily accepted the office, well knowing, as he himself states, the duties pertaining thereto, and that it was merely honorary, no salary being attached. After working "zealously" alone for several months, he has suddenly, under what authority we know not, appointed an advisory committee of thirty, who in turn appoint a series of assistants, making the total number of officials one hundred and forty-three. Forgetting his voluntary acceptance and also that of his subordinates, the Commissioner now concludes that he and they will labor no longer at his or their private expense, and consequently devotes his entire energies in securing, or, to use a common phrase, the lobbying through Congress, an appropriation of five hundred thousand dollars from which he and his deputies are to be compensated.

To say that the personal ends of these gentry do not underlie their patriotic endeavors would be absurdity; the fact is evident, and indeed is admitted by some, though, at the same time, defended by specious arguments of scientific reports, etc. It is well known that living expenses in Vienna are extremely high, and therefore half a million dollars would barely cover a year's expenditure for the number of officials above mentioned, leaving either a very small sum or nothing for the benefit of the exhibitors. We hold that this body of office holders are totally unnecessary, and that for Congress to lavish public money upon them would be both unjust and impolitic. We have ample diplomatic representation in Austria, with paid employees to look after our interests. We need no one at home to point out to our citizens where their best interests do or do not lie. Our business men are sufficiently shrewd and amply capable of managing their own affairs without any assistance from General Van Buren or his staff.

In conclusion, and on the grounds above related, we strongly urge upon Congress the denial of all applications for this appropriation. If a considerable sum is necessary, let General Van Buren, his assistants, and others who are interested in the Exposition, subscribe to the extent of their abilities, and thus further their own profit with their own funds. The country cannot and should not lavish half a million dollars, which might be far more advantageously applied to the reduction of our national debt, to the support of our own Exposition, the Centennial of 1876, and to hundreds of other purposes, than to any enterprise to which there are such strong objections, and which, at the best, bids fair to be of so little national benefit as the Vienna Exposition.

REVIVAL OF AMERICAN SHIPBUILDING.

Two new and splendid steamships, for the Pacific Mail Steamship Company, have lately been launched at Wilmington, Del. They are the *Colon* and the *Acapulco*, both of same size. Three others, for the same company, are also being built at Chester, Pa. The following are the general dimensions of the *Acapulco*: Length, 300 feet; beam, 40 feet; depth of hold, 30 feet 6 inches. She is a four-decker of 2,324 tons measurement, with a carrying capacity of upward

of 4,500 tons. Her model is handsome, and combines speed, stability, and large stowage capacity. She is to be brig-rigged, like the other vessels of the line. Her interior will be supplied with all modern improvements. The machinery is first class, of the compound type, with cylinders 51 and 88 inches in diameter, and with 42 inches of stroke; she has four boilers, 9 feet 9 inches in length and 13 feet in diameter, connected to one smoke stack; each boiler is made of 13-16 inch boiler iron, double riveted, and capable of carrying a working pressure of 70 pounds of steam. The line shafting is 13½ inches in diameter, the propeller being 16 feet 3 inches, with a varying pitch of 22 to 26 feet.

We alluded the other day to the remarkable stupidity exhibited by certain prominent shipping merchants, in requesting the American Institute, of this city, to examine and report whether the compound marine engines, now so extensively used, were really meritorious; as if the success and economy of this form of machinery, now employed on all the finest foreign vessels trading to this port, had not settled the question. Among the signers was the Vice President of the Pacific Mail Steamship Company. The engineers of that corporation seem to understand the subject, whether the Vice President does or not, for they are putting in the compound engines; and their new fleet of steamers will doubtless be enabled to make the same speed on half the coal burned in their present vessels, besides carrying more cargo. It would not be a bad idea for shipping merchants, who pay for the building of steamers, to become readers of the *SCIENTIFIC AMERICAN*, and thus keep themselves posted in the mechanical and scientific progress of the day.

THE CALIFORNIA DIAMOND BUBBLE.

For several weeks past the papers have been filled with accounts of the discovery of diamonds, rubies, sapphires, and other precious stones, in Arizona and other parts of the Western wildernesses. The wonderful region, where the gems were to be found almost as thick as blackberries, was alleged to be quite circumscribed, and very inaccessible. The fortunate discoverers brought to San Francisco a large number of specimens, which excited the astonishment and interest of everybody. It was then announced that they had arranged, by purchase and preemption, to secure the whole of the valuable area, which embraced these untold treasures. The aim of the proprietors, as they now allege, was to make arrangements for the supply of a large amount of funds, so that a body of workers might be sent to the grounds and subsisted for a length of time sufficient to collect all the jewels that were accessible. To effect this, they determined to form a joint stock company. A corporation, styled the San Francisco and New York Commercial and Mining Company, was accordingly organized, a large amount of the stock sold, and the money transferred to the pockets of the original projectors. The purchasers of the stock, in order to ascertain the approximate value of their astonishing possessions, decided to institute a careful survey of the diamond regions and, for this purpose, a scientific party, headed by the well known geologists, Clarence King, D. D. Colton, Mr. Bost, and Mr. Frey. These gentlemen, after a toilsome march, reached the alleged diamond regions, and found, surely enough, diamonds and rubies on the surface of the ground and in the crevices of the rocks. But, strange to say, in every instance of a "find," it was evident that the gems had been deposited there by the hand of man, and that none existed where, if their occurrence had been genuine, the inevitable laws of Nature would have placed them. The explorers were forced to the conclusion that the ground in certain places had been salted, or scattered over with the gems for the purpose of deceiving honest or unskilled searchers, and they denounced the whole thing as a swindle of the most barefaced description.

When the report of the surveyors reached San Francisco, the trustees of the corporation met and adopted a resolution to the effect that the fraud be at once and fully exposed, in order that the public might be protected; also that no more stock be issued or transferred, and that the corporation be dissolved as soon as practicable.

Thus ends the romance of the Arizona diamonds. It is to be hoped that the originators of this daring outrage upon innocent purchasers of the stock may be brought to justice.

OFFICIAL PUBLICATION OF THE AMERICAN PATENTS—A NEW AND IMPORTANT WORK.

No better evidence of the energy and ability which the present Commissioner of Patents, General M. D. Leggett, has brought to the discharge of his onerous duties, and no more satisfactory proof of the rapid improvements which are being effected in the department under his charge, can, we think, be asked than that afforded by the recently published volume which forms the first of a series hereafter to be issued by the Patent Office, entitled "Specifications and Drawings of Patents." It consists of a large quarto of 668 pages of letter press and 226 pages of plates, containing not the mere claims, but the entire specifications and reduced *fac similes* of the drawings of all patents issued for nearly one month. It is intended to publish this work monthly, so that the record of devices patented, instead of being obtainable only in the Patent Office, will be broadly disseminated throughout the country and made generally accessible.

The importance of this undertaking, both as an encouragement to the useful arts and as a valuable aid to the inventor, can hardly be over estimated. An immense amount of time is constantly wasted by people seeking to develop what to them are new ideas, which are in the end perfected only to be rejected, after official examination, as old and covered by previous patents, while the luckless inventor discovers too late that he might have saved all his toil and expense, had he posted himself in what others had done before