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- II. TECHNOLOGY.-The Carr Disintegrating Flour Mill, with 2 engravings.-History of the American Lead Pencil Manufacture

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CONFISCATION OF AMERICAN PATENTS.

as other property. He is not obliged to develop the inven- it been in operation. tion commercially, nor to pay any more fees. If through not, the life of the patent soon expires, and the invention too much for the whistle. falls into the common stock of knowledge, to be used or neglected as its value may determine.

Our readers are aware that in the proposed amendment of the patent law (Senate Bill 300, section xi.) an attempt is made to abolish this feature of the law. The reasons for so this city, Professor Charles A. Seeley read a letter from doing are succinctly stated in the report of the Patent Committee submitted to the Senate March 8. We quote:

"One inconvenience of the enormous increase in the number of patents granted is that many of them are for things of inconsiderable practical utility. Such patents are not merely useless, they stand in the way of every future inventor who may wish to make an advantageous use of some little feature which forms an incidental part of them. There are really obstructive patents; the thing they describe is usebe so valuable when the practical difficulties of applying it money in the endeavor to overcome them; they lie dead and useless, practically abandoned as worthless by their owners. Such patents have no reason for existence, for they neither thing can be done in instituting a better examination when judge of the degree of future usefulness are found by ex. hydrogen gas. perience to lead to fatal mistakes. The examination must be confined to the question of novelty.

"Section 11 undertakes to extinguish these worthless patents, by requiring the payment of a fee of \$50 when the patent is about four and one half years old, and \$100 when it is about nine and one half years old. The sums are large enough to make an owner think twice about paying them for a patent which, after four or nine years' trial, holds out no prospect of usefulness, while at the same time they are not too onerous for patents of any value. The plan is in use in England, and in a modified form on the continent of Eu- gas." rope, and judging from the experience of those countries will probably extinguish one half of the patents granted. It will take hold of just those patents which, useless themselves, reappear in the form of reissues, and cause those annot the ability to obtain the reissue is really responsible."

This reasoning we hold to be clearly fallacious at several points.

Grant that many patents are of considerable practical utility, shall we therefore rob the inventor of that little because it is small?

How can a patent, or the idea which it covers, be justly called worthless and at the same time desirable to another? A.'s patent is undeveloped and worthless. Why? Because

than he thinks it is really worth to him.

patents that are worthless and yet may be reissued and so matter of infinite importance to us." become troublesome. Will the reissue of a patent on an inherently worthless invention give it force and vitality?

It sometimes, indeed quite frequently, happens that an invention is "practically" worthless for many years, not cisco, Cal., met with sudden death in that city on the 2d of through its own demerit, but because the inventor foreruns November last, by accidentally falling from the roof of a new his time. Financial success implies an immediate demand, building of which he was proprietor. His age was 52 years which does not always exist for an invention that is radically His decease has cast a deep gloom over a large circle of denovel and valuable. The invention, even when unprofitable, may greatly hasten the social or industrial changes which in after years will make it a great public benefit and also a source of profit to the owner. Shall we, therefore, punish the inventor by confiscating his property because he invented too soon? In how many cases is the inventor urged on by the hope of ultimately educating the community up to the use of his invention, though the immediate prospect is black enough, and so is encouraged to make and develop his invention to his own cost through many years? Take away the assurance that his patent once gained will hold his right until the community grows up to the appreciation of it, and Stevens car brake is not an infringement on the Tanner you take away one of the strongest inducements to invent. patent. This reverses the decision of the United States Ciroften it is all he can hope to leave them. There is another way of looking at this question. Suppose it true that a certain percentage of the patents upon.

issued are at once worthless and a hinderance to the progres Hitherto one of the special features, and, we believe, spe- of the arts. How large is that percentage? There are in cial merits, of the American patent system has been the force to-day, say, 100,000 patents; we believe that the actual issuing of patents for invention without restriction or draw- number is even greater than that. How many of them are a back in the way of after charges or conditions. An inventor 'source of "annoyance" through patent stigations and the applies for a patent, and, if his claim is good, the patent is like? To say one per cent would be a gross exaggeration. granted; and there the matter rests for the allotted term of and certainly not more than halt of these would have fallen years. The patentee can sell or transfer his right the same under the exterminating influence of the proposed rule had

Accordingly, to get rid of a few patents, alleged to be misdisinclination or inability the patent is not used, the right to chievous, it is proposed to subject the entire class of future use it is not forfeited. Of course the presumption is that patentees to penalties at once uncalled for and unjust. Grant the great mass of patents, if workable, will be worked, and all that is charged against the "worthless" patents, so called; the country will begin to profit thereby without delay. If to get rid of them by such means would be paying altogether

AMERICAN HISTORY OF THE ELECTRIC LIGHT.

In a recent address before the Academy of Sciences, in Professor Moses G. Farmer, of Boston, in which he says that as early as 1859 he lighted up a house in Salem, Mass., by means of the subdivision of the electric light. Instead of using the dynamo-electric machine, he used a battery, and consequently, the cost of the light produced exceeded that obtained from gas. It is a singular fact in conjunction with this that, according to Professor Farmer, the lights thus obtained were turned on or off by means of platinum wires attached to buttons. For nearly a year, the professor less in itself; they do not disclose an invention which will alleges, the house in Salem was thus lighted, and that the fact is well known by the residents of Salem, and scientific have been overcome as to lead any one to spend time and men who visited the place from other towns and gazed with wonder at the extraordinary brilliancy of the light. Professor Seeley maintains that although the light generated by Professor Farmer by a battery was ascertained to be exconstitute nor create any progress in the useful arts. Some- pensive, now that Siemens, Wallace, and Gramme dynamoelectrical machines have been so much improved, the light they are granted, but not much, for attempts at the outset to can be generated for but a trifle of the cost of carbureted

> "No doubt," Professor Seeley said, "you think it strange that one electrician says he gets but 300 candle power per horse power from a dynamo-electric machine, while another says he gets 600 candle power per horse power. Probably both averments are correct. The trouble is that one is further advanced in the science than the other. The Messrs. Siemens, the well known English electricians, say that one pound of coal will produce fifteen times more light in connection with a dynamo-electric machine than will be produced by the same amount of coal turned into

THE SOUTH AS A COMPETITOR OF ENGLAND.

Recently an address was delivered in Blackburn, England, before an audience of two or three hundred mill managers, noyances for which the worthlessness of the invention and overlookers, and their friends interested in the cotton industrv.

The subject under discussion was the chances of England in the matter of foreign competition. After speaking of the natural advantages of the United States for producing cotton and feeding operatives, the lecturer called attention to a fact of infinite importance which is lost sight of by those who consider the power of America to enter into competition with England. "They look simply to the Northern 'mills, but there is a cotton industry growing up in the B. wants to use it! "It is naught, it is naught," saith the Southern States. It is only equal at present to one tenth of buyer." Shall the government, therefore, agree with him to the entire United States cotton industry; but the Southern manufacturers claim to have advantage over the Northern If a patent really lies "dead and useless, practically aban- manufacturers. They have an abundant supply of water, doned as worthless" by its owner, will it be killed any which is available all the year round, instead of being subdeader by legislative enactment? A patent that is dead ject to interruption in the winter owing to frost. They through inherent worthlessness is as incompetent of harm as have cotton close to their docrs; they have a more favorable any other worthless bit of paper. If it has life enough to climate, and they have equally good ports of shipment, and be an object of desire to anybody, there is no reason why they can compete with their rivals. If, then, the Northern the would-be user should not pay for the privilege of own- mills are already entering into competition with us, and the ing or using it. There is no danger that he will pay more Southern manufacturers can compete successfully with the Northern manufacturers, what is the prospect for us? The But, it is argued, it is desirable to get out of the way position likely to be assumed by the Southern States is a

WILLIAM H. RULOFSON.

Mr. William H. Rulofson, the photographer of San Franvoted admirers and friends. He was a man of rare activity, enthusiasm, and capacity. He was president of the National Photographic Association, and enjoyed the highest esteem of the members. His practical sagacity and strong common sense made him a most useful and prominent man in the community; while his genial, kindly disposition greatly endeared him to all who enjoyed his acquaintance. He leaves a wife and ten children.

(Illustrated articles are marked with an asterisk.)

V. ELECTRICITY, LIGHT, HEAT, ETC.-The Werdermann Electric Light, 9 figures.—Report of Sounds by Electricity

Electric Lamps. Formation of the electric light. The Duboscq, the Serrin, the Siemens-Halske, Archerean's, Browning's, and the Lontin and Mersanne electric lamps. Rapief's, Reguler's, and Jablochkoff's lights. The Wallace-Farmer lamp, and Werderman's Light. The action and distinguishing characteristics of each lamp explained— Forces in the Telephone.—A Story of Science.—The Absorption and Repulsion of the Chemical Rays by Colored Carbon Surfaces.—Physical Society, London, Interferance Banda, Edison's inventions, The lectric light.-Physical Properties of the Atmospheres.

- VI. NATURAL HISTORY, GEOLOGY, ETC.-The Chameleon; How it Changes Color, with 4 figures. Insect Fungi.
- VII. MEDICINE AND HYGIENE,-Lecture on Hygiene, Delivered at St. Bartholomew's Hospital, London. By REGINALD SOUTHEY, M.D. Poisonous Infecting Principle as the Determining Causes of Disease. Zymotic Diseases. Difference in the Development of the two Dis-
- VIII ARCHÆOLOGY -Remarkable Discoveries in Rome. Excavation of the Palatine Hill. The Ruins of the City of Romulus brought to Ruins of the Temple of Jupiter Stator. The Temple of Vesta, Light etc. Recent Assyrian Discoveries. 4 figures.

An Important Railway Decision.

The United States Supreme Court has decided that the Even if I die before my reward comes," the inventor says, cuit Court for the Northern District of Illinois, in the case the patent will remain as a legacy to my family." Very of Sayler vs. The Chicago and Northwestern Railway Company. The decision is based entirely on the question of infringement, the validity of the patent not being passed