

Recent Foreign Patent Law Cases.

GAS MAKING—On the 3rd of July last, a case for the infringement of two patents was decided before Chief Baron Pollock, London. The parties were George R. Booth, a practical chemist, as plaintiff, and J. Kennard, civil engineer, as defendant. The action was for the infringement of two patents granted to the plaintiff—one for the 12th Oct., 1850, and the other on 8th of May, 1852.

The first patent was for an improved apparatus for making gas from oil. Its novelty consisted in suspending the retort by the neck in a heated furnace, and making the inside of the retort corrugated. By this means a more equitable heat was obtained than by the old system of making gas from oil, by dropping the oil upon stones or bricks in the retort, which latter rested upon brick work, instead of being suspended by the neck in the furnace, and allowing the fire free access around it. The second patent was for making gas direct from oleaginous seeds, instead of first extracting the oil from them. This latter patent was stated to be valuable, as it enabled every farmer growing flax or rape seed to make his own gas by a small portable apparatus. The defendant had made and sold apparatus and materials for making gas in London, the same as those embraced in Booth's two patents.

The Chief Baron said, in giving his decision, that "he was decidedly of opinion that the second patent was void, inasmuch as the patentee, by it, claimed the making of gas from seed or any other vegetable substance, by any process whatever. This is fettering skill and genius for fourteen years in a way that the law will not allow. A more simple process might be invented for obtaining gas from seed, and other vegetable substances claimed, and the inventor prevented from using it."

The defendant's counsel said that if this was the view of Judge Pollock, and the direction he intended to give the Jury, he would tender a bill of exceptions to have the opinion of a Court of Error. The verdict was then taken as to this patent subject to the bill of exceptions, and the Jury discharged from giving a verdict on the first patent by consent of both parties.

DRESSING SILK—On the 7th of July, a case was decided in London, at the sitting of the *Nisi Prius*, before Baron Martin, and a special jury for the infringement, by J. H. Jourdain, of a patent for dressing silk, granted to W. Hendrie, on the 11th May, 1845. When silk in skeins is boiled or dyed, and dried in a loose state on poles, it appears lusterless, and has a cottony surface. To increase the luster, it has to be scutched, and wrung by a pin on what is called "a peg"—a horizontal wooden arm.—The improvement consisted in imparting a beautiful luster to silk skeins, by placing banks of silk on a machine having distended arms, adjustable by screws, by which the silk was stretched fully out in a wet state, and then placed in a stove room, and submitted to heat until dry. The plaintiff had long been suspicious that the defendant was using his machine, and endeavored to obtain access to his premises, but could not for years, until the new patent act was passed in 1852. He then found that the defendant was using a machine for drying silk, consisting of three hollow metal cylinders heated by steam, two of which revolved, but fixed in their bearings, while the third was capable of rotation, and of being drawn further out on its axis by a powerful screw. The damp skeins of silk were placed over two cylinders, and passed around under the adjustable cylinder, and were distended.—These were then made to rotate until the silk became dry and was beautifully lustered. The plaintiff concluded that this machine, in every respect, infringed the claims of his patent.

On a cross examination, the plaintiff admitted that a machine which was produced in court for accomplishing the same results, had been in use in Manchester in 1839, six years before the date of his patent. This machine consisted of an upper and lower bar, adjustable by screws, on which the silk was hung and stretched until it was dry.

Sir F. Thesiger, the plaintiff's counsel, upon the production of this machine in Court, said the case was so strong against him, that he was not prepared to answer it, and would, therefore, submit to a nonsuit.

The method described of drying and lustering damp silk skeins will be of use to many of our manufacturers. Silk in the piece has been so dried from time immemorial.

History of the Telegraph; Difficulties and Success of an Inventor.

At the time the party which went from this city to witness and assist at the laying of the submarine cable between Cape Breton and Newfoundland were lying at St. John's, a dinner was given on board the *James Adger* to the public citizens of that place, at which Prof. Morse was toasted and complimented as follows:

"The steed called Lightning (say the Fates),
Was tamed in the United States,
'Twas Franklin's hand that caught the horse,
'Twas harnessed by Professor Morse."

To this Prof. M., who was present, made a very appropriate reply. He said:

"I thank you ladies and gentlemen, most cordially, for the flattering mention you have made of me in connection with the electric telegraph, for it expresses the kindness, the generosity of your own hearts. But, ladies and gentlemen, I place myself as one only amongst the instrumentalities in this great enterprise of binding the nations together in the bands of electric intercourse. It is thus only that I find relief from what I may truly style the oppression of praise. It would be hypocrisy in me to affect callousness or indifference to the good opinion of my fellow men. I have not so superficial a self-knowledge as not to be aware that there is something within this bosom ever ready to kindle at the least spark of praise, a pride that would give utterance to the arrogant boast, "Is not this great Babylon that I have built, by the might of my power and for the honor of my majesty?" Who is it that commands the lightnings to go, and they go? Who gave the telegraph to the world? An incident in the early history of the telegraph is directly pertinent to the answer to these questions. At two sessions of the Congress of the United States, my petition for the pecuniary aid of the government to construct the experimented line of telegraph from Washington to Baltimore, to test its practicability and utility, dragged its slow length along, and the close of the session of 1842 and '43 threatened a result as inauspicious as the previous session of 1837 and '38. I need not more than allude to the fact that in the previous session of 1837, I had expended all the pecuniary means I possessed to sustain myself at Washington while urging upon the attention of Congress this then untried, this then generally esteemed visionary enterprise of an electric telegraph. Years were required to put myself again in a pecuniary condition to appear before Congress with my invention, and now I saw the last day of another entire session just about to close, and with it the prospect of still another year's delay. My bill had indeed passed the House. It was on the calendar of the Senate, but the evening of the last day had commenced with more than one hundred bills to be considered and passed upon before mine should be reached. Wearied with the anxiety and suspense, I consulted with one of my Senatorial friends; he thought the chance of reaching it so small that he advised me to consider it as lost. In this state of mind, I returned to my lodgings to make my preparations for returning home the next day. My funds were reduced to the fraction of a dollar. In the morning, as I was about to sit down to breakfast, the servant announced that a young lady desired to see me in the parlor. It was the daughter of my excellent friend and college class-mate Henry L. Ellsworth, the Commissioner of Patents. She called, she said, by her father's permission, and in the exuberance of her own joy, to announce to me the passage of the telegraph bill at midnight, but the moment before the Senate's adjournment. This was the turning point of the telegraph invention in America. As an appropriate acknowledgment for her sympathy and kindness, a sympathy which a woman can feel and express, I promised that the first dispatch by the first line of telegraph from Washington to Baltimore should be indited by her. To which she replied, "I will hold you to your word." In about a year from that time the line was completed, and everything being prepared, I apprised my young friend of the fact. A note from her enclosed this dispatch: "What

God hath wrought!" These were the first words that passed upon the electric wires on the first completed line in America."

[As the success of every useful invention encourage men of capital to assist in the introduction of others, so every deceptive scheme exerts an opposite influence. For these reasons, we have always freely expressed ourselves against useless novelties calculated to deceive the public, well knowing that they tended to injure the prospects and interests of honest useful inventors. We early advocated the claims of the electric telegraph to public patronage, and felt a sincere pleasure in doing so, and we have witnessed its unparalleled success in all parts of the world, with nearly as much enthusiasm as the inventor. It is but eleven years since the telegraph line of 40 miles in length, spoken of by Prof. Morse, was built, and now there are no less than 32,000 miles of telegraph wires on our continent. Was ever success more complete or more astounding? Never. These 32,000 electric nerves run east, west, north or south, and form the public heart-strings of 27,000,000 of people. Day and night they cease not to throb with intelligence, and they confer upon man a power of semi-omnipresence. In Europe lines of telegraph have been constructed to an extent nearly rivalling those in America, and difficulties have been met and overcome far surpassing in magnitude any of those in our own country. The electric wires extend under the sea of the English Channel, the German ocean, and the Mediterranean. They pass from crag to crag on the lofty Alps, and run through Italy, Switzerland, France, Germany, and Russia. They will yet extend through the Atlantic ocean, and their circuit—"the ends of the earth."

[For the Scientific American.]

Encroachments on the Patent Office.

The letters and articles on this subject, which have appeared in your paper of late, are unfortunately but too deserving of the attention they claim, and, if redress is not found at present headquarters, the sooner a change of those who preside takes place, the better. But what if it does, how is the evil already committed to be remedied,—possession is well known to constitute nine-tenths of right, as viewed by the law, and, supposing a change of the presiding deities to be effected, what is to insure exemption from a continuance or repetition by another, of the outrages of which you so justly complain? Does not the history of the past show that like evils, though never to the same barefaced extent, have, through almost every Administration been—here a little and there a little,—perpetrated, till the Patent Office has been robbed of almost all its just rights,—its room applied to purposes totally foreign to its character, and its Chief left without the right to appoint those as his officials for whose acts he is held responsible.

Complaints as to encroachments, then, are useless as long as the Patent Office remains a dependency of the Department of the Interior. Murmurs equally as loud and just have before been heard, but with little or no effect, and if present outrages be arrested, the disease will again, ere long, break out, perhaps in a more violent form than ever. You do right, therefore, in attacking the root of the disease. Make the Patent Office a Bureau of Invention, as you propose, with its Secretary to "enjoy all the advantages that the other chief officers of the government possess," then, with a Charles Mason as Secretary, and an examining corps, etc., left to his appointment, the Institution could not fail to be one of envy and admiration to the world. The space now pillaged from the Office would soon be filled, open to clear daylight inspection, with useful models of both patented and unpatented inventions, as prescribed by law. As a Bureau of Invention, free and unshackled in its operations, it would quickly be seen that the arts and sciences, on which the prosperity of the country depends, took a nobler and a wider flight, and flourished in proportion to the protection and encouragement bestowed on them. More that is beautiful, as well as useful, and equally the offspring of inventive genius, would here find a home, a fostering care, that would serve to refine the minds and morals of our people; while the mechanic arts, which almost alone have made us superior to the savage, would

then find in the Patent Office a nursery for their growth, which at present they so imperfectly experience.

Shall interests so important be trampled upon, or treated as but of secondary value, or be made the dirty tool of a political movement?

Such has been done, and is now being done. Inventors, rouse yourselves for once from your supineness, and each think and make it his business to interfere. The Patent Office must have larger powers given it, and then you will have less cause for complaint. A remedy has been proposed—see to it, and that earnestly, promptly, by convention or not, as you please, but, ere next Congress meets, have your petition ready; see that it fails not in the number of petitioners, but let it be both long and strong. You have no time to lose; evils are being done that may be beyond the reach of remedy soon, and your grievances are many. INVENTOR.

Washington, Sep. 21, 1855.

Oil Used on Railroads.

We are indebted to Edward H. Jones, master mechanic, for a table of the miles run and the oil used, by each engine, on the Albany and Utica division of the New York Central Railroad during the months of July and August last. The practice of publishing monthly tables of the amount of oil used on this railroad and the Erie, is working wonders. We published statistics of the use of oil on the Central Railroad during the month of May last on page 396, last volume. On the above division of this road, there were 49,988 miles run in May, and 3,624 pints of oil used, being 13.4-5 miles run to one pint. During the past month (August,) 46,675 miles were run, and 2,904 pints of oil used, being sixteen miles run to one pint. The greatest number of miles run to one pint of oil was 23.75-100, by engine No. 15 (Freight,) D. Apps, engineer, and it is remarkable that this engineer run his engine in July 2,370 miles, and in August 2,375 miles, using 100 pints of oil exactly each month.—This we call steady management. It is stated in this report, that the passenger and helping engines use more oil in proportion on account of the grade, than the freight engines—the amount being one pint for only eight miles run. One of the conditions to be taken into consideration in judging of the economy of each engine, is the amount of load drawn, or, what is better, perhaps, the length of trains. The publication of these reports giving the quantity of oil used, and the miles run by each engine, will call forth the unceasing vigilance of engineers to the condition of their locomotives, and also direct peculiar attention to their character. Only one engine—the *President*—with inside connections is reported; all the others have outside connections. During a recent trip over this division of the Central Railroad, we were most favorably impressed with the character of the best locomotives used on it and built at the Schenectady Works, under the able superintendance of Walter McQueen, M. E. They are powerful, beautiful, and skilfully constructed engines, and have a deservedly high reputation.

Discovery of a Dangerous Reef.

The discovery of a rock in the Gulf Stream, heretofore unknown, is announced by Capt. Tessler, of the American trading ship *Pierre*. The rock is stated to be in N. lat. 35° 14', W. long. 73° 21'. It lies in the direct path of vessels running between the Southern ports of this country and New York, Europe, &c. The head of the rock presents a surface of only 50 square feet, and rises but a few inches above the surface of the water. Lieut. Maury will have to send out a vessel to make special examination.

The Weight of Castings by Patterns.

Messrs. Editors—Some time since, I think you said that a rule for finding the weight of a casting by weighing the pattern, would be useful. Our patterns are made mostly of white pine, commonly called here "hill pine;" each ounce of such patterns we call equal to one pound of iron, or a little over, say one-tenth for instance. A pattern that weighs 50 ounces we say the casting will weigh 55 pounds.

Chenango, N. Y. N.R. M.

A solution of muriate of gold will stain hair an auburn color.