



#### Patent Claims.

The List of Patent Claims had not arrived from the Patent Office when we went to press. We greatly regret this, as we like to have the claims every week,—hundreds of our readers anxiously await them.

#### An Interesting Patent Case.—An Example to Judge Kane.

Although we honestly and sincerely devote our energies to the advocacy of inventors rights, we also, because it is just, advocate the rights of the public at the same time. It is well known that we have given our reasons why we believed the late decision of Judge Kane, in the Telegraph Case, was wrong. The question was between two of our patentees, and the decision rendered by him, without a trial at common law ever having taken place between the parties, was one of the most despotic acts that we ever heard of, and would not be rendered by any judge under the monarchical government of England. We learn by the London Patent Journal, of Dec. 13, that a case came up before Sir J. Parker, the parties being Laird vs. Crippin—the plaintiff applying for an injunction to restrain Crippin from using his patent rudder, patented in 1843. The rudder was used on a ferry steamboat, named the Nymph. The following is Judge Parker's decision:—

"His honor said that he had no doubt of the plaintiff's title for the purpose of this motion. The only question was as to the infringement of plaintiff's patent by the defendants; and upon this he should express no opinion, but should leave it for a jury to decide. What, then, ought to be done in the meantime? If, on the one hand, the defendants were to be restrained from using the vessel in question until after a trial had been had at law, the defendants would have suffered irreparable injury by the suspension of the profitable employment of their vessel, if the verdict of the jury should be in their favor. If, on the other hand, the plaintiff succeeded, the infringement of his rights would admit of pecuniary recompense; for his only object was to obtain compensation for the use of his patent. In the present case, defendants were not making a systematic use of plaintiff's rights; for they were charged with infringing the patent in one only out of the three vessels they owned. The motion must stand over till the result of an action at law be known, defendants undertaking to keep an account of the receipts and expenditure of the vessel, and submit to my order the Court might make as to compensation (if any) to be made to plaintiff."

In this case the defendants were not patentees, and yet how careful Judge Parker was not to prejudice and injure their rights. In the case of Judge Kane, the defendant was an American patentee, and had a patent for his invention.

#### The Bain Telegraph.

It seems that the statement made last week, about the Bain Line having been sold to the Morse Co., is true, but the line which was sold was that between Washington and New York, and against which Judge Kane so summarily granted an injunction. The sale was made after the injunction was granted; an appeal had been taken from the Judge's decision. Both sides, it seems, felt uneasy. The Merchants' (Bain's Telegraph) Line, has published a card, stating that neither the suit spoken of, nor the compromise which grew out of it, have anything to do with it. "We are satisfied, says the card, "of our moral and legal right to the business we are prosecuting."

They certainly have a moral right to it, for the invention, in essence and principle, is entirely different, but then Judge Kane would say they had no legal right to it. In our way of judging, that which is morally right should never be held legally wrong.

The end of the case between the Morse and

Bain Lines, between this city and Washington, has ended like many other patent cases, (not a few of them in connection with the Woodworth Patent), of the stronger party absorbing by one way or another, the weaker. We dislike to see those who are right, although weaker, selling the morality of the question,—for such is the light in which we view it. We go for defending the rights of every patentee, be he who he may. Out of this question a free public telegraph may yet be brought forward. In all likelihood the owners of the Morse patent will make out a fine bill of expenses, and get a renewal of the patent, to make still richer five or six fat companies.

#### Extinguishing Fire—Air-Slacked Lime.

MESSRS. EDITORS—In your paper of Dec. 27, there is a communication in relation to the extinction of a fire by air-slacked lime, and the writer has never been able to account for that phenomenon. We have not the article before us, at present, but will endeavour to explain the operation in plain chemical terms.

The formula of the carbonate of lime is  $\text{CaO}$ , Co. 2,—of lime  $\text{CaO}$ . The carbonate of lime being burned dispenses with its carbonic acid, Co. 2,—retains its oxygen, and is then, as above stated  $\text{CaO}$ , that is, one atom of calcium and one of oxygen. This, exposed to the air, imbibes moisture and carbonic acid, and finally becomes a neutral carbonate of lime, combined with a portion of water,  $\text{CaO}$ , Co. 2 H. O. When this air-slacked lime was thrown on the fire, the carbonic acid and water were expelled, by which the flames were extinguished.

QUARTERMAN & SON.

New York, 1852.

#### Philadelphia Museum.

This Museum having been burned down, it appears that Mr. Barnum has suffered no loss by it, as he states, by a card, that he sold out his interest in it last summer. This is a pity, for if he had been the proprietor it might have been saved by his extensive share of annihilators. Dr. Colton could have applied them to save every wax-figure, from Daddy Lambert to the Witch of Endor.

#### Width of the Ohio River.

"Taking advantage," says the Cincinnati Commercial, "of the present frozen state of the river, our City Civil Engineer, Mr. Gilbert, had it carefully measured in several places, yesterday, for future reference; and we obtained from Mr. S. W. Irvin, the principal assistant, who made the measurement the following particulars:—At Main street the river was found to be 1200 feet wide; at John street 1370 feet, and at the intersection of Fifth and Front streets, 1100 feet, making an average of 1223 1-3 feet. The river is at this time 11 42-100 feet above extreme low water, and the above measurements are taken at the present water lines."

#### Influence of America and Webster's Dictionary in India.

It is well known that America is exercising a most important influence in the East Indies by her missionaries, and it is interesting to us to notice how the labors of men in every department of literature and science are made, in the providence of God to subserve the cause of our missions. As an example, we learn by the Journal of Missions, that the labors of Noah Webster, though designed primarily for those speaking the English language, are likely to prove of signal service in respect to unnumbered millions using widely different tongues. Mr. Spaulding, one of the oldest missionaries of the Board in Ceylon, after using his "Dictionary, unabridged," for about a year, pronounces it, "in every respect more complete than any one work, and even all other works of the kind, in the English language." The manner of using it, which has led to the above conclusion, he describes as follows:—"From the day of its arrival, four, six, or ten pages each day, for four days each week, passed under my eye, and every word which was thought would be useful to missionaries, to civilians, or to Tamil youth studying the English language, with its various shades of meaning was defined by Tamil synonyms, or idiomatic phrases." In this way he has prepared the second edition of the English and Tamil Lexicon, a volume of nine hundred octavo pages.

Thus the labors of Dr. Webster are made available for a race amounting to twelve millions of souls. As all the missions of the principal Boards of the United States have been furnished with copies of the Dictionary, it may be presumed that this is only the commencement of the beneficial influence of this great work, which may be used as the means of preparing other dictionaries, for the instruction of other millions, in almost every part of the heathen world.

In connection with the literature of America, works of science frequently find their way from our country far up in the interior. Two years ago we received a letter from the Capital of Siam, from an American mechanic, who received the Scientific American in bundles about six times per year. Civilization, which at one time came from the east, is now going there from the west.

#### Medicinal Cigars.

A London paper says:—The employment of various organic and inorganic substances of a volatilizable nature in the cigar form, has frequently been resorted to. In this way stramonium, cicuta, Raspail's camphor, and corrosive sublimate, have been used by means of tobacco deprived of its nicotine. The great efficacy of this last substance in some forms of ulcerated throat, in Dr. Landerer's hands, has rendered him very desirous of extending this form of medication. He prepared cigars, therefore by moistening tobacco freed from nicotine with tincture of iodine, a solution of mercury in sulphuric ether, or a solution of iodine of potassium. He found these cigars of great utility in some ulcerations of the throat. So, too, by moistening tobacco with an aetherial solution of hyoscyamin, he has relieved most obstinate spasmodic cough, without including any narcotism. Among other substances tried, he found a solution of creosote in spirit of wine and ether a very useful form in scorbutic ulceration of the gums. Cigars formed of this substance are also very useful in the tooth-ache. Arsenic cigars, formed by steeping the tobacco in Fowler's solution, have also been employed; and Dr. Landerer believes that this form of medication might be extended to a great variety of substances. These methods may be safe in the hands of scientific men, but should never be attempted by inexperienced individuals.—[Exchange.]

[This is our opinion exactly; it would be dangerous for inexperienced persons to use them, and experienced persons should not do it either, except upon the principle of desperate diseases requiring desperate remedies, when such prescriptions may be justified in principle and practice.]

#### Melting of Metals.

The enclosed memorandum, cut from an exchange, has elicited some discussion, and the query is, from what did Fahrenheit base zero or 0 in his scale—was it the point at which alcohol freezes or not? An article in your paper explaining this would be interesting.

J. L. C.

The following are temperatures on Fahrenheit's scale at which some of the most remarkable effects of heat are produced:—

- 2,786 ° Cast iron melts.
- 2,200 ° Gold melts.
- 1,986 ° Copper melts.
- 1,873 ° Silver melts.
- 1,560 ° Brass Melts;
- 1,141 ° Heat of a common fire.
- 980 ° Red heat.
- 218 ° Sulphur melts.
- 212 ° Water boils.
- 184 ° Alcohol boils.
- 98 ° Blood heat.
- 36 ° Olive oil Freezes.
- 31 ° Water freezes.
- 20 ° Wine freezes.
- 14 ° Oil of turpentine freezes.
- 1 ° Oil of vitriol freezes.
- 39 ° Mercury freezes.
- 45 ° Nitric acid freezes.
- 60 ° Greatest cold ever observed in the Arctic regions.
- 135 ° Greatest cold yet produced by artificial means.

A mixture of 7 parts of snow and 4 of diluted nitric acid gives a cold of 30° below zero.

Three parts of snow and two of diluted acid reduce the temperature to 46° below zero.

[In Fahrenheit's scale the interval between the freezing and boiling points of water is divided into 180 equal parts, or degrees, which was chosen by Fahrenheit (or probably Roemer), from some theoretical considerations respecting the expansion of mercury, it being computed that the thermometer when plunged into melting snow contained 11,156 parts of mercury, which, at the temperature of boiling water, were expanded into 11,336 parts, being placed at 32° below the freezing heat of water. It has been frequently stated that this point was selected as indicating the temperature of a freezing mixture of snow and salt; but it appears from Boerhaave that it was adopted from a still more precarious supposition, namely, the greatest colds observed in Iceland, which was probably assumed to be the lowest natural temperature. The freezing point is thus marked 32°, and consequently the boiling point at 32+180=212. It must be admitted that this scale, though it possesses some advantages in the lowness of the zero point and the smallness of the divisions, is not well adapted to philosophical purposes.]

#### Consumption of Tobacco and Tea in Britain.

During the year 1851, it appears that there has been a large increase in tobacco and tea, in consequence of the Great Exhibition and the influx of foreigners. In 1851, in the nine months ending Oct. 10th, the total quantity of unmanufactured tobacco entered for home consumption was 20,836,522 lbs., and during the corresponding period of the year, it amounted to 20,909,582 lbs., being an increase of 73,060 lbs. The quantity of manufactured tobacco and snuff during the same periods were respectively 154,066 lbs., and 166,311 lbs., being an increase of 12,245 lbs. in the nine months. In the consumption of tea there was also great increase. In the nine months of last year the consumption was 39,403,195 lbs., and in this year, 41,200,725 lbs., being an increase of 1,797,550 lbs., in the nine months. What would Sir Walter Raleigh and King James I., with his anti-tobacco blasts; what would Jonas Hanway and Samuel Johnson say to these statistics? It is satisfactory to add, that the consumption of spirits during the same period was less than in the nine months of the previous year by 72,849 gallons.

#### For One Dollar.

Sets of Volume 5, "Scientific American," (minus four numbers) will be furnished from this office for ONE DOLLAR.

For particulars concerning other back volumes and numbers, see notice on advertising page.

#### Bolt Heading Machine Patent.

The claim on page 126, respecting which the name was not received, we have since learned, should have contained, as patentee, the name of Nathan Starks, of Albany, N. Y.

#### January Thaws.

The news of freshets are coming in from all quarters; at Albany on the Hudson, and various places on the Connecticut river, great freshets had been experienced.

The Kossuth Hat, with the little black feather, was all the rage on New Year's Day. There was a perfect sea of plumes in the street. Well, out of fashion with the hard shells as soon as possible.

Our Minister at Paris, Mr. Rives, has not yet recognised the Dictator Government of Ham Napoleon. Mr. Rives' conduct meets with the commendation of all our people.

It is said that a terrible and singular disease has just broken out in Gallacia, Poland, which defies all the efforts of the medical faculty to explain or cure. It is an epidemic, and has received the name of the "sleeping fever."

A very rich mine of bismuth has been discovered in the French colony of Algeria.

Williamsburgh, N. Y.,—just across the river, and next-door neighbor to Brooklyn—became a city on last Monday. A great noise was made by the firing of cannon.

The New York Herald and the New York Art Union have got into a law tussle about a libel, said to be perpetrated by the former.