

THE NEW PATENT LAW.

AN ACT

In Addition to "An Act to Promote the Progress of the Useful Arts."

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the Commissioner of Patents may establish rules for taking affidavits and depositions required in cases pending in the Patent Office, and such affidavits and depositions may be taken before any justice of the peace, or other officer authorized by law to take depositions to be used in the courts of the United States, or in the State courts of any State where such officer shall reside; and in any contested case pending in the Patent Office it shall be lawful for the clerk of any court of the United States for any district or Territory, and he is hereby required, upon the application of any party to such contested case, or the agent or attorney of such party, to issue subpoenas for any witnesses residing or being within the said district or Territory, commanding such witnesses to appear and testify before any justice of the peace, or other officer as aforesaid, residing within the said district or Territory, at any time and place in the subpoena to be stated; and if any witness, after being duly served with such subpoena, shall refuse or neglect to appear, or, after appearing, shall refuse to testify (not being privileged from giving testimony), such refusal or neglect being proved to the satisfaction of any judge of the court whose clerk shall have issued such subpoena, said judge may thereupon proceed to enforce obedience to the process, or to punish the disobedience in like manner as any court of the United States may do in case of disobedience to process of subpoena and testificandum issued by such court; and witnesses in such cases shall be allowed the same compensation as is allowed to witnesses attending the courts of the United States: *Provided,* That no witness shall be required to attend at any place more than forty miles from the place where the subpoena shall be served upon him to give a deposition under this law: *Provided, also,* That no witness shall be deemed guilty of contempt for refusing to disclose any secret invention made or owned by him: *And provided, further,* That no witness shall be deemed guilty of contempt for disobeying any subpoena directed to him by virtue of this act, unless his fees for going to, returning from, and one day's attendance at the place of examination shall be paid or tendered to him at the time of the service of the subpoena.

SEC. 2. *And be it further enacted,* That, for the purpose of securing greater uniformity of action in the grant and refusal of Letters Patent, there shall be appointed by the President, by and with the advice and consent of the Senate, three Examiners-in-Chief, at an annual salary of three thousand dollars each, to be composed of persons of competent legal knowledge and scientific ability, whose duty it shall be, on the written petition of the applicant for that purpose being filed, to revise and determine upon the validity of decisions made by Examiners when adverse to the grant of Letters Patent; and also to revise and determine in like manner upon the validity of the decisions of Examiners in interference cases, and when required by the Commissioner in applications for the extension of patents, and to perform such other duties as may be assigned to them by the Commissioner; that from their decisions appeals may be taken to the Commissioner of Patents in person, upon payment of the fee hereinafter prescribed; that the said Examiners-in-Chief shall be governed in their action by the rules to be prescribed by the Commissioner of Patents.

SEC. 3. *And be it further enacted,* That no appeal shall be allowed to the Examiners-in-Chief from the decisions of the Primary Examiners, except in interference cases, until after the application shall have been twice rejected; and the second examination of the application by the Primary Examiner shall not be had until the applicant, in view of the references given on the first rejection, shall have renewed the oath of invention, as provided for in the seventh section of the act entitled "An act to promote the progress of the useful arts, and to repeal all acts and parts of acts heretofore made for that purpose," approved July fourth, eighteen hundred and thirty-six.

SEC. 4. *And be it further enacted,* That the salary of the Commissioner of Patents, from and after the pas-

sage of this act, shall be four thousand five hundred dollars per annum, and the salary of the Chief Clerk of the Patent Office shall be two thousand five hundred dollars, and the salary of the Librarian of the Patent Office shall be one thousand eight hundred dollars.

SEC. 5. *And be it further enacted,* That the Commissioner of Patents is authorized to restore to the respective applicants, or when not removed by them, to otherwise dispose of such of the models belonging to rejected applications as he shall not think necessary to be preserved. The same authority is also given in relation to all models accompanying applications for designs. He is further authorized to dispense in future with models of designs when the design can be sufficiently represented by a drawing.

SEC. 6. *And be it further enacted,* That the tenth section of the act approved the third of March, eighteen hundred and thirty-seven, authorizing the appointment of agents for the transportation of models and specimens to the Patent Office, is hereby repealed.

SEC. 7. *And be it further enacted,* That the Commissioner is further authorized, from time to time, to appoint, in the manner already provided for by law, such an additional number of principal Examiners, First Assistant Examiners, and Second Assistant Examiners as may be required to transact the current business of the office with dispatch, provided the whole number of additional Examiners shall not exceed four of each class, and that the total annual expenses of the Patent Office shall not exceed the annual receipts.

SEC. 8. *And be it further enacted,* That the Commissioner may require all papers filed in the Patent Office if not correctly, legibly, and clearly written, to be printed at the cost of the parties filing such papers; and for gross misconduct he may refuse to recognize any person as a patent agent, either generally or in any particular case; but the reasons of the Commissioner for such refusal shall be duly recorded, and subject to the approval of the President of the United States.

SEC. 9. *And be it further enacted,* That no money paid as a fee on any application for a patent after the passage of this act shall be withdrawn or refunded, nor shall the fee paid on filing a caveat be considered as part of the sum required to be paid on filing a subsequent application for a patent for the same invention.

That the three months' notice given to any caveator, in pursuance of the requirements of the twelfth section of the act of July fourth, eighteen hundred and thirty-six, shall be computed from the day on which such notice is deposited in the post office at Washington, with the regular time for the transmission of the same added thereto, which time shall be indorsed on the notice; and that so much of the thirteenth section of the act of Congress, approved July fourth, eighteen hundred and thirty-six, as authorizes the annexing to letters patent of the description and specification of additional improvements is hereby repealed, and in all cases where additional improvements would now be admissible independent patents must be applied for.

SEC. 10. *And be it further enacted,* That all laws now in force fixing the rates of the Patent Office fees to be paid and discriminating between the inhabitants of the United States and those of other countries which shall not discriminate against the inhabitants of the United States are hereby repealed, and in their stead the following rates are established:—

On filing each caveat, ten dollars;
On filing each original application for a patent except for a design, fifteen dollars;
On issuing each original patent, twenty dollars;
On every appeal from the Examiners-in-Chief to the Commissioner, twenty dollars;

On every application for the reissue of a patent, thirty dollars;

On every application for the extension of a patent, fifty dollars; and fifty dollars, in addition, on the granting of every extension;

On filing each disclaimer, ten dollars;
For certified copies of patents, and other papers, ten cents per hundred words;

For recording every assignment, agreement, power of attorney, and other papers, of three hundred words or under, one dollar;

For recording every assignment, and other papers, over three hundred and under one thousand words, two dollars;

For recording every assignment or other writing, if over one thousand words, three dollars;

For copies of drawings, the reasonable cost of making the same.

SEC. 11. *And be it further enacted,* That any citizen or citizens, or alien or aliens having resided one year in the United States, and taken the oath of his her or their intention to become a citizen or citizens, who by his, her, or their own industry, genius, efforts, and expense, may have invented or produced any new and original design for a manufacture, whether of metal or materials and original design for a bust, statue, or bass relief, or composition in alto or basso rilievo, or any new and original impression or ornament, or to be placed on any article of manufacture, the same being formed in marble or other material, or any new and useful pattern, or print, or picture, to be either worked into or worked on, or printed, or painted, or cast, or otherwise fixed on any article of manufacture, or any new and original shape or configuration of any article of manufacture, not known or used by others before his, her, or their invention or production thereof, and prior to the time of his, her, or their application for a patent therefor, and who shall desire to obtain an exclusive property or right therein to make, use, and sell, and vend the same, or copies of the same, to others, by them to be made, used, and sold, may make application in writing, to the Commissioner of Patents, expressing such desire; and the Commissioner, on due proceedings had, may grant a patent therefor, as in the case now of application for a patent, for the term of three and one-half years, or for the term of seven years, or for the term of fourteen years, as the said applicant may elect in his application: *Provided,* That the fee to be paid in such application shall be, for the term of three years and six months ten dollars, for seven years fifteen dollars, and for fourteen years thirty dollars: *And provided,* That the patentees of designs under this act shall be entitled to the extension of their respective patents, for the term of seven years from the day on which said patents shall expire, upon the same terms and restrictions as are now provided for the extension of Letters Patent.

SEC. 12. *And be it further enacted,* That all applications for patents shall be completed and prepared for examination within two years after the filing of the petition, and in default thereof, they shall be regarded as abandoned by the parties thereto, unless it be shown to the satisfaction of the Commissioner that such delay was unavoidable, and all applications now pending shall be treated as if filed after the passage of this act; and all applications for the extension of patents shall be filed at least ninety days before the expiration thereof; and notice of the day set for the hearing of the case shall be published, as now required by law, for at least sixty days.

SEC. 13. *And be it further enacted,* That in all cases where an article is made or vended by any person under the protection of Letters Patent, it shall be the duty of such person to give sufficient notice to the public that said article is so patented, either by fixing thereon the word patented, together with the day and year the patent was granted; or when, from the character of the article patented, that may be impracticable, by enveloping one or more of the said articles, and affixing a label to the package, or otherwise attaching thereto a label on which the notice, with the date, is printed; on failure of which, in any suit for the infringement of Letters Patent by the party failing so to mark the article the right to which is infringed upon, no damage shall be recovered by the plaintiff, except on proof that the defendant was duly notified of the infringement, and continued after such notice to make or vend the article patented. And the sixth section of the act entitled "An act in addition to an act to promote the progress of the useful arts," and so forth, approved the twenty-ninth day of August, eighteen hundred and forty-two, be, and the same is hereby, repealed.

SEC. 14. *And be it further enacted,* That the Commissioner of Patents be, and is hereby authorized to print, or, in his discretion, to cause to be printed, ten copies of the description and claims of all patents which may hereafter be granted, and ten copies of the drawings of the same, when drawings shall accompany the patents, provided the cost of printing the text of said descriptions and claims shall not exceed, exclusive of stationery, the sum of two cents per hundred words for each of said copies, and the cost of the drawings

shall not exceed fifty cents per copy; one copy of the above number shall be printed on parchment, to be fixed to the Letters Patent; the work shall be under his direction, and subject to the approval of the Commissioner of Patents, and the expense of the said copies shall be paid out of the patent fund.

SEC. 15. *And be it further enacted*, That printed copies of the Letters Patent of the United States, with the seal of the Patent Office affixed thereto, and certified and signed by the Commissioner of Patents, shall be legal evidence of the contents of said Letters Patent in all cases.

SEC. 16. *And be it further enacted*, All patents hereafter granted shall remain in force for the term of seventeen years from the date of issue, and all extensions of such patents are hereby prohibited.

SEC. 17. *And be it further enacted*, That all acts and parts of acts heretofore passed which are inconsistent with the provisions of this act be, and the same are thereby, repealed.

Nebraska—Salt Wells and Burning Bluff.

The following extracts are taken from a late report of a committee of the Nebraska Legislature on the mines and minerals of that Territory:—

On the eastern borders of Lancaster county, in a basin or marsh enclosed by a semi-circular range of bluffs, are a dozen or more of these springs, of unusual strength and value, which pour their waters into Salt Creek, which runs through the basin in such quantities as to render the saline quantity of its waters readily apparent, and traceable by the eye for a long distance below where they fall into the Platte. These springs are represented by parties who have visited them to be of immense value, pouring forth a large volume of water containing an extraordinary percentage of pure salt, which has impregnated the land surrounding them for quite a distance. And as they are only some forty miles from the Missouri river, the day may not be far distant when they will prove a source of great wealth to the Territory.

So rich are the waters of these springs that a thick crust of pure salt forms around their edges and on the margins of the streams by which their waters flow into the creek. Persons living in that locality gather this crust by the wagon load and bring it into Nebraska City, where it finds ready sale. By a little refinement to remove the earth attached to it, it is made to excel in quality the finest article of dairy salt imported into the territory.

A few miles from Concord, and about eight miles northwest of Ponca, in Dixon county, is a locality known in that region as the Burning Bluff. And even when the thermometer is at its lowest, by reason of intense cold, the face of this bluff is comparatively hot. It abounds in small holes or cavities, from whence issues a kind of steam or vapor, with a temperature so high as to be painful to the hand of the visitor exposed to it. At the foot of this bluff, presenting the appearance of having been blown, as it were, from the holes and cavities in the face of the bluff, lie large quantities of alum. Strange as it may appear, this fact, though generally known among those well informed with reference to the eastern portion of our Territory, has attracted little or no attention. Who can tell what wealth may lie hidden there?

The western portion of Nebraska, extending to the Rocky Mountains, is rich in gold, silver, lead, copper, cinnebar, coal and gypsum. The people of the eastern section desire that the mining region should be formed into a separate government. It is assumed in the report that the gold of Nebraska for 1860 amounted to \$20,000,000. This great Territory contains within its limits sufficient land to form half a dozen of large States. The Platte Valley stretches westward for 600 miles, until it reaches the Rocky Mountains. It is a broad, level and fertile valley, furnishing an easy route for a railroad, and it is really fit for an empire in itself. Nebraska is rapidly filling up with an industrious, intelligent and moral population.

The Prospects of the Atlantic Telegraph.

A writer in the *Edinburgh Review*, after giving a complete history of the Atlantic telegraph cable, comes to the following conclusion in regard to the causes of its failure:—

The account which we have given shows that its failure was in a great measure owing to the absence of a proper preliminary experimental inquiry into the conditions required in the construction of such a cable. But the more immediate causes of its failure were, 1st, The absence of sufficient care in the manufacture of the cable from the limited time allowed for its completion; 2d, The injury that the cable received by repeated handling between the time when it was constructed and the time when it was laid; 3d, The insufficient protection of the outer covering against corrosion; 4th, The insufficient size of the conductor and its insulating covering in proportion to the length of the cable—a want which necessitated the use of high battery power."

The same writer says that all the lines of ocean telegraphs which have received government aid have failed, while quite a number which depend entirely on their own business for support are entirely successful. He expresses the opinion that, "At no very distant period, submarine telegraphs, established on sound principles and in a durable manner, will encircle the globe."

Our Correspondence.

Buckwheat—Its Poisonous Effects—The Honey Bee.

MESSRS. EDITORS:—There is in buckwheat an essence or medicinal principle upon which its irritating qualities depend, and is called *apis venenum* or "bee poison." This is one of the sources from whence the common honey bee obtains its poison; hence, the same disagreeable effects follow the immoderate use of honey when obtained from the buckwheat.

The bee takes from the flower a portion of its medicinal virtues with the saccharine matter of the plant, which, by passing through the internal laboratory of the insect, becomes separated into its primary constituents of *apis venenum* and honey; the one being deposited in cells for the sustenance of the insect, and the other laid by within itself as a means of defence.

Now, in making this separation in the chemical laboratory of the insect (or by accident where dead bees are in the honey while being rendered), it often occurs that portions of this poison are mixed with the honey, producing all the disagreeable effects which would result from the use of buckwheat itself.

There is, perhaps, no article containing as great a percentage of this poisonous principle used for food as buckwheat in its various forms; and the sameness of its aroma, with that given off by the common honey bee is a proof of its identity.

All poisonous insects and reptiles are healthy, active and virulent in proportion to the plentiful supply of the poison they are enabled to derive from their food; and while feeding on such articles as yield them this supply, their stings or bites are more virulent than at other times. This I saw fully demonstrated last winter, in transporting the honey bee over the Isthmus to California from the cold regions of the North. The sting from those bees, in the most unhealthy state, produced but little sensation or effect upon the human flesh.

The nervous, warlike habits of the honey bee during the period of the flowering of buckwheat fully corroborate the doctrine that this plant contains considerable quantities of poison, and it is on this principle that its irritating qualities depend.

The best remedy to prevent the disagreeable burning and itching sensation of the skin caused by a free use of buckwheat cakes, is carbonate of soda (or an alkali of a similar nature), used in their raising, or taken internally when the itching has taken place in consequence of having eaten too freely of the cakes. And here let me state that an alkali of the above chemical nature, immediately taken and applied to the skin after a bite or sting of the most poisonous insect or reptile, is a good antidote, and will, in most cases, save the unfortunate victim from any serious harm.

Racine, Wis., Feb. 28, 1861. S. W. JEWETT.

What a Couple of Patentees Say.

We publish the annexed letters as specimens of the flattering testimonials we are daily receiving from inventors whose patents were taken out through this office:—

GENTLEMEN:—I received Letters Patent for my second Beehive a few days since, and return you my thanks for your successful efforts—especially so as you have procured a recognition of *all* the claims. I can cheerfully recommend your agency to all inventors and those applying for patents, who wish their business attended to with promptness and dispatch. I have reason to believe that your agency is not only more prompt and successful in this business, but that the expenses attending it are less than when left to others.

I expect soon to send you another application; and, from the confidence I have in you, I shall entertain no doubt but that you will succeed in that also.

Yours, truly, S. R. BRYANT.

Waterford, Pa., March 6, 1861.

GENTLEMEN:—My patent came to hand last night, and am thankful for your promptness in this case. I shall ever remember your kindness, and recommend your agency above all others.

Herrickville, Pa., March 4, 1861.

The French System of Weights and Measures.

MESSRS. EDITORS:—It is somewhat surprising that your lynx-eyed correspondents in Maine do not keep you posted up in the resolutions of that go-ahead State.

On the 2d of February, the Governor of Wisconsin delivered to the Legislature the resolutions of Maine, in regard to a uniform system of weights, measures and currency. The ball is rolling from Maine to Texas—on the one side truth, on the other error. Which shall prevail?

JAMES EDI.

Verona, Wis., Feb. 29, 1861.

Column of Varieties.

Every person in Great Britain pays annually an average about three pounds sterling for the support of the government.

In 1558 the aggregate tonnage of the whole English navy was only 11,820 tuns, or about one half of the *Great Eastern*.

It costs from four hundred to five hundred dollars to inflate a balloon thirty feet in diameter with hydrogen gas.

About \$100,000 worth of hard india-rubber, for the manufacture of combs, is imported annually from the United States into England.

The population of Canada West, by the last census taken, amounts to 1,460,000, that of Canada East 1,300,000—making a total of 2,760,000.

The steamship *Adriatic*, the last vessel built by the late George Steers, and which, from first to last, cost \$1,200,000 to build and finish, has been sold to the Galway Company for \$436,000.

The ship *Saranak* lately sailed from Philadelphia for Liverpool, having on board 48 cars for city railroads in England. These cars were built in Philadelphia, and contain arrangements for burning gas.

The new Houses of Parliament in London are going to decay rapidly. The ammonia in the fogs which arise from the river Thames this acts upon the stones of the buildings and dissolves them.

Telegraph lines have been carried from Russia in Europe into Asia, and they are now progressing with extraordinary rapidity. Siberia will soon be traversed with them, and it is currently reported that the emperor intends to carry them by a submarine cable to his North American possessions. It is possible that our latest news from London may yet be obtained by the way of Oregon.

The American *Bee Journal* states that the nectar of flowers, as gathered by bees, is a watery solution of cane sugar. In the process of this transformation, the cane sugar is decomposed into three different kinds, which constitute honey. The heat which the bees maintain in the hive causes this change; weak acids, as well as heat and moisture, can effect a similar conversion of cane sugar.

The Philadelphia *Ledger* advocates steam power as a substitute for horses on railroads in that city. We know that steam would be more economical and believe equally safe on city as on country railroads, and the day is not far distant when it will be generally used on them. Some arrangements must be devised, however, to obviate overheating each car by the boiler in warm weather. In winter such heat is desirable; in summer the reverse.

The London *Mechanics' Magazine* states that John Chedgely, of that city, has succeeded in turning and boring glass, and has thus rendered it more applicable to a great variety of useful purposes. He makes glass cylinders perfectly round and smooth; also very strong glass pipes as substitutes for metal in conveying acids and alkalies, and his cylinders are eminently adapted for the barrels of pumps. Glass tubes of moderate bore are quite common, but they are never made with a uniform size of bore.

On the Chicago and Milwaukie Railroad a very beautiful application of the photographic art is used on the "season passes" and "commutation tickets" to prevent their illegal transfer. When a person applies for a season pass or ticket, he incloses his photograph taken on a small gummed label, and this is pasted on the card which he receives. The conductor of the train can thus see at a glance whether the bearer of a pass or ticket carries the evidence of "the right man being in the right place."

About the best known preparation for friction matches consists of gum arabic, 16 parts by weight; phosphorus, 9 parts; niter, 14; peroxyd of manganese, in powder, 16 parts. The gum is first made into a mucilage with water, then the manganese, then the phosphorus, and the whole is heated to about 130° Fah. When the phosphorus is melted, the niter is added, and the whole is thoroughly stirred until the mass is a uniform paste. The wooden matches prepared first with sulphur, are then dipped in this and afterwards dried in the air. Friction papers, for carrying in the pocket, may be made in the same manner, and by adding some gum benzoin to the mucilage they will have an agreeable odor when ignited.