

Scientific American.

NEW YORK, DECEMBER 3, 1853.

Banding about Inventions.

Interested and selfish parties have done, and are now doing, an immense amount of mischief by dragging their business quarrels before the public, in the form of crimination and recrimination respecting the pirating and use of certain inventions and discoveries. In an article published by us recently, on page 21, we alluded to the cards which had appeared in certain papers relating to sewing machines; but such machines are as nothing in comparison with that great monster of newspaper card controversy, "Vulcanized India Rubber." As sulphur is the principle ingredient, and heat the agent in effecting vulcanizing changes in this material, it also appears as if a spirit from the hot-brimstone den of old Satan himself were infused throughout everything connected with its manufacture and management.

On page 45 we published a description of J. Rider's process, as described in his patent, for the preparation and manufacture of fabrics from "gutta percha," which goods resemble and equal those heretofore made from india rubber. With the inventor we never had any acquaintance, or conversation; we presented the subject and much useful information in connection with it, as something new and important to our readers in the field of inventive progress. The discovery of a method of preparing gutta percha—this new and singular oriental product—whereby it can be so treated as to make excellent and peculiar fabrics, we considered—as we now do—a very valuable addition to the manufacturing interests of our country. Our implied opinion, in the article referred to, was, "that gutta percha, chemically, is not an analogue of caoutchouc;" this opinion, however, was not broadly stated. Since that period some of the daily papers, in our city, have actually granded, day after day, with long paid articles on the subject. In all of these infictive documents on the one side, W. Judson, attorney for Charles Goodyear, charges J. Rider with infringing the "vulcanizing india rubber patent," by asserting that gutta percha is analogous to caoutchouc, and that the process for manufacturing the former substance is embraced in the patent of Goodyear. The cards of the Goodyear side of the question are couched in terms of an exceedingly sulphurous character; and to these Rider has replied in language not less sulphuric. On paper, these two gentlemen exhibit an appearance like that of the famous Kilkenny cats: they have worried one another until nothing is left but their vertebral appendages. No patentee has any moral right to act as the attacking party in this case has done. If that party honestly believes that others are infringing his patent, no one knows better than the author of those furious newspaper articles, that the only way of obtaining redress is from our courts of justice—and that way is broad and open before him. Nay, we go further than that; we assert, that the lawyer of a patentee, who does not promptly seek proper redress for his client, through the proper channel, does not do his duty to his own profession, or the interests of his client. We cannot but censure the conduct of any lawyer who, instead of enforcing the rights of his client, and seeking redress before the proper tribunals, inflicts the public ear with *parte* statements and one-sided arguments. By such conduct, and the frequent use of the words "invention and infringing the patent," in the articles published, the public, who know nothing about the real causes, or the merits of the controversy, are led to believe that the spirit of the bottomless pit is not only part and parcel of these sulphuretted patents, but other patents also. The very idea of a patentee, or the lawyer of a patentee, failing to seek redress promptly for his asserted wrongs, by the only legal means whereby redress can be obtained, and instead thereof, paying large sum of money for abusive newspaper articles, rises, with it a conviction that there is something morally wrong about the matter. The best and

the quickest way to settle such disputes, is to submit them to a jury of twelve intelligent American citizens. We do not want the public ear continually inflicted with quarrels about "patents new and patents old," when at the bottom of all, neither inventions nor patents, but certain manufacturer's interests, are the sole and ruling motives for strife. To those patent lawyers engaged in this controversy, we must apply a parodied couplet of old Hudibras,

"The lawyer drum of gum-elastic
They beat with pen instead of a stick."

To the public let us say, "heed not the cards published in our daily papers about patent quarrels: the authors of them have specific objects in view, best known to themselves; they know how and where to obtain redress, and their complaints deserve the censure and condemnation of all honest patentees."

Patent Office Report for 1852--No. 6.

EXAMINER LANE.—It will be remembered by our readers that we published illustrations of an improvement in glass lenses for signal lights, &c., on pages 273 and 274, Vol. 8. This improvement consists in moulding dioptric lenses in one piece, instead of making them of a number of separate concentric rings connected together. The Report speaks favorably of this improvement. The object of such lenses is to throw the rays of light in parallel lines, thus rendering them visible at a great distance; an invention, as applied to lighthouses, for which we are indebted to Fresnel, the celebrated French optician. These lenses are on exhibition at the Crystal Palace. A patent was granted for a novel method of frosting the surface of glass plates, by placing a plate of glass flat in the bottom of a box made to rock like a cradle, and then covering it with sand, pebbles, and water. The rocking motion causes the sand and pebbles to slide over the surface of the glass, from one side to the other, and thus produce that fine abrasion which gives its surface a frosted appearance; the glass may receive the motion instead of the sand, and the same effects be produced. The two patents for improvements in tanning—Eaton's and Kennedy's—the one embracing the use of the sulphate of potash, and the other that of borax, both of which have been published in our columns (Vol. 8) are noticed. The Examiner considers the applications for patents, for tanning operations, as "exceedingly perplexing." The double back railroad seat and sofa, illustrated on page 356, Vol. 7, is favorably noticed—likewise a few other car seats, for which patents were granted. Examiner Lane's Report is indeed a good one.

EXAMINER BALDWIN.—This gentleman was appointed successor to Dr. Page, who resigned his office. He has charge of four classes of inventions, embracing, first, stoves, lamps, ventilators, &c.; second, the fine arts—embracing painting, sculpture, engraving, printing, binding, and jewelry; third, medicine, surgery, and dentistry; fourth, designs. "The whole number of examinations," says the Report, "during the year was 796, of which 223 were patented, including 106 designs; and 249 were rejected, including 20 designs. The new applications referred to me during the year were 402, including 126 designs, of which 54 cases remain unexamined." (From these figures we have not been able to form a correct estimate of the number of applications passed and the number rejected.) One of the patents granted was for a camphene lamp, surrounding the wick of which was a chamber filled with water, for the purpose of extinguishing the light, if by any accident the lamp should fall or get upset. One improvement on railroad lamps, for which a patent was issued, consisted in having a body of water kept in contact with the back of the reflector to prevent it from becoming unduly heated. A patent was granted for a very useful improvement on the blow-pipe, which renders it very useful to the dentist and jeweller: it can be used with gas or made to receive its supply of air for the common lamp from a bellows; it is arranged in such a manner that while held in the one hand, the flame can be directed upon any point desired, by a movement of the thumb.

The extent and importance of the pianoforte trade is stated to be of the value of \$2,100,000 in 1852, and the number of instruments made

9000. The fabrication of them is stated to give employment to 1900 persons, whose aggregate wages are \$72,000 per month. This estimate, we are positive, is too low. A patent for a printing telegraph is briefly described, which is called "the most interesting invention that has come under his examination." To us it resembles the House Telegraph, which was patented a number of years ago, and with which all our readers are familiar. "Of the several applications made for patents on medicines during the year, not one was granted;" but a patent was granted on a machine for making medicines for the million, which deserves notice. *Physic* is fed in at one side, between two cylinders, having hemispherical recesses that match with each other, and on the other side it comes out in pills by the box full. The medicine trade has not been a barren one for inventors, as in connection with this pill making machine, another patent has been granted for administering *physic*—a clapper spoon—and a very useful invention it is, especially for feeding some kinds of medicine to children.

This Report concludes with an expression of surprise at the few applications which were made for patents on designs. The office has always been very liberal to this class of applications; we have no doubt, however, but such kinds of applications will yet be more numerous than they now are. Fortunes have been made by peculiar patterns of calicoes, and ornamental designs of jewelry. Our artists will yet be more wise in seeking the protection of our patent laws for their works of ornament and decoration.

Stealing Remarks—The Tribune.

We clip the following from the "Tribune" of the 21st inst.:—"The 'Scientific American,' stole our remarks on the Crystal Palace Inauguration, did them up in its own way, and now boasts of it as original. Is that scientific?"

The New York "Tribune" is an independent and talented journal—its Editors believe in calling things by their right names. Having considerable admiration for plain dealing, and not wishing to set aside the rule of honesty, especially in dealing with those who are classed among its chief champions, we take this occasion to state that the above paragraph, charging us with having stolen their article on the Crystal Palace inauguration, is grossly false, and we ask of the Editors, as they frequently do of those journals who misrepresent their views, to correct it. The ideas expressed in reference to the treatment of mechanics, as put forth in the "Tribune," and which we are now charged with having stolen, are not new to the readers of the "Scientific American," and if there is any plagiarism in the case, we are not the guilty parties. The article published in the "Scientific American" was written on the evening of the day of the inauguration,—this we recollect perfectly well; it is therefore impossible that we could have stolen the ideas from the "Tribune's" article—which did not appear until after ours was written.

The article in the "Tribune" was bold and manly,—we were glad to see it; but its appearance before the publication of our own does not establish, as a matter of course, that the ideas could not have entered other brains than the writer's—this supposition is a little too arrogant. Under the same rules of ethics, we might charge the "Tribune," with stealing the thunder of foreign journals upon the arrival of every steamer, doing it up in its own way, and then claiming it as original. We shall not measure our cotemporary by any rule against which we protest—it is not "scientific" or gentlemanly.

Fine Penmanship.

"A day or two since we noticed a specimen of fine writing by a gentleman in Bolivar, Tennessee, executed in the space of a quarter inch square, which had even attracted the attention and praise of so high an authority as the 'Scientific American.' We were yesterday presented with a still finer specimen of the same art, executed by J. M. Culver, of the 'Memphis Commercial Academy,' to which it gives us sincere pleasure to contribute our praise. Mr. Culver is well known here as an accomplished penman, but the feat which he has

achieved in writing the whole of the Lord's Prayer in a space less than a quarter of an inch square, we confess to have surpassed our anticipations. The letters are all fully and distinctly formed, and the style of execution is as elegant as it is exact."

[The above is from the "Memphis Appeal." We have since received from Mr. McDowell, of Bolivar, Tenn., three cards, on each of which is beautifully written the whole of the "Lord's Prayer" in a circle whose diameter is one-eighth of an inch. The space contained within a circle of one-eighth of an inch, is one-quarter the area of a quarter of an inch circle; this writing is therefore four times finer than that mentioned by the "Appeal." McDowell is the champion yet in diminutive penmanship.

To FIND THE AREA OF A CIRCLE.—A very good rule for obtaining the area of a circle is to multiply half the circumference by half the diameter. A simple rule to obtain the circumference of a circle is, as 7 is to 22 so is the diameter to the circumference. Squaring the circle is yet a problem. This rule may be reduced to decimals, so as to bring out a more correct result, but for common purposes it is very useful. By these rules, then, the diameter of the circle of one-eighth is one-half of one-fourth of an inch, or as 2 is to 4; therefore $2 \times 22 \div 7 = 6 \frac{2}{7} \div \frac{1}{8} = 3 \frac{1}{7} \times 4$; area of the one-eighth diameter circle; $4 \times 22 = 88 \div 7 = 12 \frac{6}{7} \div \frac{1}{8} = 6 \frac{3}{7} \times 2$ (half of four) = $12 \frac{6}{7}$, or four times $3 \frac{1}{7}$. The result does not quadrate by $2 \frac{2}{7}$ with the first problem, because the relation of each circumference accords with its diameter. The rule of this problem is found by the theorem of the triangle, which supposes the circle to be a regular polygon of an indefinite number of sides; the sum of the sides, then, will be the perimeter of the circle, consequently the radius of the circle will be the altitude, and the perimeter the base of the triangle; the area, as is well known in trigonometry being found by $A \times \frac{1}{2} B$; or, $\frac{1}{2} A \times B$; or, $\frac{1}{2}$ cir. $\times \frac{1}{2}$ diam. These rules will enable any person possessing an acquaintance with common arithmetic to find out the area of any circle by measuring its diameter; such as the number of square inches area of a "piston" or cylinder. The cubic contents of the latter can be found out by multiplying the area by the height, either in inches or feet, according to the unit chosen.

The Erie Railroad.

The wide track of the New York and Erie Railroad has been completed to Jersey City, and passengers are now carried without change of cars from that place to Dunkirk, 469 miles. This road is an enduring monument to the skill of the engineers who planned and executed it, as it runs through some of the wildest portions of our State, and obstacles have been overcome which less daring minds would have deemed insurmountable. This is the longest road built and owned by any private company in the world. We shall at some future time present our readers with some statistical information concerning it.

Analysis of Rain Water.

The "Comptes Rendus," gives the result of an analysis of M. Martin, of 14 litres (904.434 cubic inches) of water, which fell during a violent storm at Marseilles; he did not find the least indication of the presence of iodine nor of nitric acid, which some chemists pretended to have discovered in rain water. The two ingredients, excepting pure water, which he found were the chloride of sodium or common salt and ammonia.

PRIZES!! PRIZES!!

The following Splendid Prizes will be given for the largest list of mail subscribers to the Scientific American, sent in by the first of January next:

\$100 for the largest list.	\$30 for the 7th largest list.
\$75 for the 2d largest list.	\$25 for the 8th ditto
\$50 for the 3d ditto	\$20 for the 9th ditto
\$45 for the 4th ditto	\$15 for the 10th ditto
\$40 for the 5th ditto	\$10 for the 11th ditto
\$35 for the 6th ditto	\$5 for the 12th ditto

The cash will be paid to the order of the successful competitors immediately after January 1st, 1854.

These prizes are worthy of an honorable and energetic competition, and we hope our readers will not let an opportunity so favorable pass without attention.

For Terms see Prospectus on the last page.