

Scientific American

NEW YORK, NOVEMBER 9, 1850.

Commissioner of Patents' Report.

Last week we set forth the amendments suggested by the Commissioner, to be made to the Patent Laws. Since that time we have read a letter in the Washington "Republic," and by its tone we would infer that the Report has been the subject of some late hostile attacks. The letter referred to is a very weak production, but somewhat truthful. It is wrong to make uncandid attacks upon any man, or the production of any man, but in reviewing a public document, it is as certainly wrong not to give free and candid expression to opinions, whether favorable or unfavorable to the sentiments expressed in the subject under review.

The Report is the best printed and does more justice to inventors, whose contributions sustain the Patent Office, than any Report previously issued, and we will take pleasure in presenting the substance of the same from time to time, which will be found of great interest to the majority of our readers.

There are four Chief Examiners in the Patent Office; each has charge of a certain department, for the examination of a certain class or classes of subjects: Charles G. Page, M. D., has charge of the department embracing philosophical instruments, such as electric and telegraphic machines, &c.; stoves, &c.; musical instruments; fine arts, embracing painting, maps, drawings, &c., and surgery, embracing all connected with this art and dentistry; and to this is attached a part of manufacturing processes, such as attaching hooks and eyes to cards, and also atmospheric churns, &c. Before the increase of Examiners in the Patent Office, all the subjects were divided between two—Prof. Page and Mr. Fitzgerald. About two years ago, two more Chief Examiners were added to the Office, viz., Mr. Renwick, of New York, and Prof. Gale; the former never was in the Patent Office before his appointment, but the latter was in the capacity of Assistant Examiner under Dr. Page. The classes of subjects are now divided among these four, but they are not yet well arranged: out of twenty-three classes, Examiner Page has seven classes, a synopsis of which, as covering his labors for 1849, we will now present, and take up the reports of the other Examiners regularly in other numbers:—

EXAMINER PAGE'S REPORT.—In 1849 a valuable machine was patented for separating magnetic iron ore by revolving electro magnets: this was Ransom Cook's invention, and was illustrated in the Scientific American. A number of patents were granted for telegraphs, and the famous contest between Morse and Bain was settled, by which a patent was granted to each claimant, and the decision of the Patent Office reversed, as we predicted, and away and behind all this—both of these patents—we can assure the Patent Office that we know something of another chemical telegraph. This case is stated to be the first trial of appeal from the Patent Office, in open court; the whole case has been faithfully reported, and contains a great deal of information useful to inventors. A railway telegraph, to tell the traveller the place he is passing, was patented, and it seems to be identical with the one published in No. 1, Vol. 4, Scientific American, and is now free, we believe. The Calculating Machine, illustrated and described on page 388, same volume, was patented, and the nature of its construction and operation is particularly described in the Report. A patent was granted for measuring distances by observation, and is said to measure a distance of 40 or 50 miles. A patent was granted for a self-igniting lamp, which was lighted by pulling a string, when a friction match, by machinery, was ignited and carried forward to the wick of the lamp.

The most singular case, or rather cases, of all, was a patent which was granted for a species of atmospheric churn, and before the Patent Office, two other inventors claimed the same improvement; one was from Ohio, an

other from Illinois, and a third from Vermont. An interference was declared, and no sooner was the decision made (which was in favor of the patentee) than three other inventors claimed it,—all living at a distance from one another. The improvement consisted in having a hole through the entire length of the common churn dasher, with a valve opening downwards, to admit air from above, but which would allow no cream to come up from below. A knowledge of this case is important to inventors—all these six men were no doubt original inventors. Whenever an important improvement is made, application should at once be made for the patent, for no secret use of an invention can prevent another man getting a patent for the same thing.

The American Institute.

The name of this Association is a glorious one. To distinguished foreigners, it conveys the idea of being the moral centre of all that is noble and distinguished in American Science and Art; but the name is too good for the faculty who seek shelter for their stunted acquirements beneath the magic of its significance. If any person has the least idea that the American Institute fairly represents American Science and Art, he is greatly, very greatly mistaken. With but three or four exceptions, we think there is not a man who is connected with its management, or who has any influence in its actions, that is the least distinguished in any department of Philosophy or Art. We should indeed feel ashamed of our glorious country if the Institute enfolded all Americans, who were distinguished for scientific and mechanical attainments, or that it was looked upon as the mirror which reflects upon other nations the semblance of American mind. There are many far younger, weaker, and smaller institutions, in our land, whose managing members stand far higher than those of the A. I., in every acquirement which should belong to managing members of such associations.

That the Fairs for the exhibition of works of art and ingenuity do good, no one doubts; but the object of doing good is only secondary, the principal object of the managers being the best way of making the most money, and the easiest way to please all the influential exhibitors. Just look at five gold medals awarded for five planing machines—all first best, too, and then what is the conclusion? Not a very favorable one, surely. That some prizes are rightly awarded, no one will doubt; it would be a miracle were it to happen otherwise; but that a prize granted to one machine, work of art, &c., and not to another, is to be taken as an evidence of the superiority of the one, in all cases, and the inferiority of the other, is all nonsense—no one in New York looks upon the prizes in this light. Trashy things get prizes sometimes, and things of utility and beauty are often overlooked; this is owing to the incapacity of the judges; they listen to the best story—a modest man, however meritorious his invention may be, stands a far worse chance of being distinguished than one who, with "words of wondrous length and thundering sound, boasts of his ware, his merchandise and skill."

As an advertising medium, the Fair is a good institution, and as such it is to be recommended, but in nothing more, excepting in bringing ingenious men together—men who are mostly outsiders. As for scientific emanations proceeding from the Institute, whoever heard of such things. It may well be said about it what a benighted Hibernian said about a certain dingy lighted city, "one thing is very clear, this town is very dark."

Improved Saw.

Since we noticed an improvement on saws, a few weeks ago, (page 28) Mr. Tuttle has been bored with quite a number of communications on the subject—almost every one claiming to be the original inventor. Not one, however, seems to understand the improvement thoroughly. Mr. Tuttle does not claim his third tooth, as therein mentioned, because it is straight, but because it is a plane. He used the third tooth himself, just like some of his correspondents, some years ago. In every case a correspondent should pay his postage.

Captain Taggart's Propeller Balloon.

On Thursday, last week, we went over to Jersey City to see Capt. Taggart make an ascension in his propeller balloon. The place selected was a very bad one, viz., the dock behind what is termed the "Thatch Cottage." The most contemptible means were employed by hundreds to shirk the payment of the admission fee, and when the time for ascension arrived, we suppose that there were five within the enclosure who had not paid, to one who had. The balloon was not very well managed we think: there was too little hydrogen gas in it, and the attendants did not appear to be well acquainted with their business; and beside this, the crowd was allowed to press close up to the apparatus. At 4 P. M. the captain got into his car, and although it was not quite buoyant enough to lift him freely upwards in a vertical position, yet he thought that by turning one of his guiding wings, he should shoot upwards out of the reach of all ground obstructions. The rope was then cut, and the balloon, with the gallant little Captain in it, went off—but not in the way he desired. The strong south breeze carried him against the little bridge; his propeller wing was broken, and he was dragged through the canal and then against the tall trees of the garden; this arrested its progress, when the Captain got out after some trouble, and a rope being attached to the apparatus, it was dragged from the trees across the bridge by a roaring set of on-lookers, and then (as it appeared to us) the rope designedly parted, when the balloon and broken car went off, up and away, like a rocket—lost to the Captain forever.

Many people in our city, when they saw the balloon passing over them, supposed the Captain to be riding on the clouds, but he was safe on terra firma.

If ever we needed confirmation to our often expressed opinions respecting the impossibility of aerial navigation, according to the present state of science, we need it no more. The Captain's propelling apparatus is the best that we ever saw. If ever we had sympathy for any man, it was for him: we could not get the thought of him out of our mind during the whole of that night. The crowd, the majority of whom neither paid to see, nor had sense to make due allowance for unfortunate circumstances, abused the Captain with their tongues, shamefully.

We have heard that he intends to build another balloon; we hope he will be more successful than with his last. His loss and expenses have been very great, and when we consider that he made two previous ascents in Massachusetts, and that he was totally unacquainted with ballooning before that, he certainly deserves praise for his nerve and enterprise, and we hope the public will not neglect to be generous to him. We don't like humbug inventors—we despised the tricks and exposed the sham of the California balloon in 1849, because it was a project to make money and gull the public, but Captain Taggart is a sincere and an honest-looking man, and a complete enthusiast in the utility of his invention, which we deeply regret, knowing the dangers of his adopted profession, but on that account he surely deserves a greater supply of popular sympathy.

Machinery for Turning Irregular Forms.

MESSRS. EDITORS:—In your paper of Sept. 7th an article was published that proved injurious to me, and I wish you to correct the error. I had made a model of a machine; with a stationary pattern and material:—two of the gentlemen interested in Blanchard's machine called on me, and after an examination of my model, Mr. Lindsley, of Newark, said he had been under the impression that the pattern rotated, but that he never had seen a machine like it. Mr. Howard, of Philadelphia, stated afterwards that he had a conversation with Mr. Lindsley, and was better satisfied than if ten men had given their opinion and that he could not see any part of my machine that interfered with the Blanchard Machine; I never received a notice of a suit as stated by your Philadelphia correspondent, as I never had a machine except the model—but I have since commenced one. I wish you

to examine the model submitted and you will oblige me by publishing the above with your opinion of my machine. JONATHAN RUSSELL, No. 3. Cherry st., Philadelphia.

Oct. 30th, 1850.

[We publish the above in justice to Mr. Russell. The article to which he refers was a communication from Philadelphia. We know nothing about the case only as represented in the communication referred to, and by Mr. Russell's own statement. The model referred to above, has no rotating pattern, nor does the rough material revolve. Two rotary cutters and two tracers are employed, which turn or cut out the form of the pattern on the rough material in sections. The cutters and tracers are set nearly opposite to one another, and move longitudinally along the frame, but only one section of the pattern is cut out on the rough material during one longitudinal movement from end to end, of the cutters and pattern tracers. As a whole, we do not think that it is as good a machine as Mr. Blanchard's, and we cannot see how they can be similar in principle.

Jenny Lind's Concerts at Tripler Hall.

The concerts of Mademoiselle Jenny Lind continue to attract hosts of admirers of the art vocal; we are not surprised at this, for no one, after hearing the sweet strains which flow from her lips—however incapacitated they may be to criticise—can wonder at the generous enthusiasm which attends her whenever she appears.

The new Hall (splendid in design and execution,) is well adapted, in every respect, to give a full and legitimate effect to her voice, and so far her triumph has been sufficiently brilliant to gratify the highest expectations she could have conceived. New laurels have been added to her resplendent fame, by the concerts at Tripler Hall, and to such of our citizens as have not heard her, we would advise them, by all means, to seize upon the present opportunity.

There are, however, a large number of industrious mechanics in this city who are desirous of hearing her, and feel themselves unable to pay the present prices. If we mistake not, Mr. Barnum, with his accustomed liberality, aided by Jenny's whole-souled benevolence, will afford them an opportunity to do so at reduced prices, before she finally leaves us. Castle Garden would hold a number sufficient to pay well at \$1 to all parts of the building.

Fall of a Suspension Bridge.

A suspension bridge built on Dredge's principle, across the river Leven, at Balloch, Scotland, recently fell while a flock of sheep were beginning to pass over it. On examination it was found that the cause of failure was owing to the previous breakage of a small iron rod, only one inch in diameter. One thing singular about it was the dropping of one half of the bridge, and that not the one the sheep were on, but the opposite half. Does this show that, from the abutment, the weight on the bridge acts throughout the whole length of the bridge upon the long end of the lever, and not from the apex of the arch.

An Important Paragraph.

To preclude our subscribing friends the necessity of writing for the back numbers of the Scientific American, we shall forward to all new subscribers the back numbers of Vol. 6, dating their subscriptions from the commencement unless they instruct to the contrary when they remit. We shall pursue this course of sending the back numbers issued on this volume until No. 13, and after that time the names will be entered from the date of the reception of orders, unless the writer expresses a wish to receive the back Nos.—in that case they will be promptly forwarded.

Those desiring volume 5 of the Scientific American are informed that we are able to furnish a few complete volumes, (bound,) at \$2.75 each. Also, we can send by mail sets complete, minus No. 1, for \$2. We would also say, that whenever our friends order numbers they have missed—we shall always send them, if we have them on hand. We make this statement to save much time and trouble, to which we are subjected in replying, when the numbers called for cannot be supplied.