

Scientific American.

NEW YORK, MAY 13, 1864.

Rich and Poor Inventors.

There is a prevailing opinion with many, that inventors are in general very poor; that the great mass of them who have lived and died, went down to the grave loaded with poverty, and that the majority of those who are now living, will meet the same doom. This is a mistaken notion, conclusively proven by the paper of Dr. Gale (who is Chief Examiner in the Chemical Department of the Patent Office), on another page. It is true that many men, whose inventions have greatly benefited mankind, have departed this life in poverty and neglect, the value of their labors not being appreciated until they were beyond the reach of human reward or praise. We expect that some inventors will meet with disappointments in every age, for it is more than can be expected, that the merits of every improvement will be appreciated during the lives of inventors. But the number of such inventors cannot be very large, if their inventions are meritorious, for the means which are at the command of inventors at the present day,—such as the press—to disseminate a correct knowledge of their improvements throughout the civilized globe, are such as no previous age in the world's history could boast of. It was very different with inventors in the days of Evans, Fulton, Whitney and Watt; and yet, when with all their disadvantages, many of the old inventors, from being poor, became rich men, what should inventors not expect for their benefit, at the present day, in comparison with those of the ages past and gone. James Watt was once a poor man, but he died very rich; Richard Arkwright died the richest commoner in England, and with a title tacked to his name—a pretty high elevation from cropping heads and shaving beards. Whitney, we believe died comparatively wealthy, and so did many other American inventors. There are quite a number of living inventors, who, from being once poor men, have become comparatively wealthy.—We could name a host of such, but this, without their consent, would perhaps not be proper. There are but few in our country who are not acquainted with one or more inventors who have been greatly benefited in a pecuniary point of view, by their inventions.

It is true that there are but few prominent and distinct inventions like the telegraph, and it cannot be expected that all inventors should meet with the same amount of remuneration, but when a Chief Examiner of the Patent Office—who has access to the records which describe the sums paid for patented inventions, tells us that "it is a very small matter indeed, if a patent is not worth \$5000; that medium ones are worth from \$20,000 to \$50,000, and many not worth less than from \$100,000 to \$500,000 each," we have reason to state, with all confidence, that inventors who secure patents are full as well rewarded as any class of men in the world.

One reason why patents are more valuable now than formerly, is no doubt owing to the rigid examination which they have to undergo in the Patent Office, and the care and qualifications necessary on the part of those who prepare such papers. But another reason, and one equally as good, is owing to the means which patentees now have of spreading abroad a knowledge of their improvements among the people. A man may have talents, but who can know this, if he ties them up—like the fool in the parable—"in a napkin." So it is with an invention—mechanical or chemical; who can know what it is, or what are its merits, if a knowledge of the same is locked up in a chamber? Without feeling the least degree of conceit on the subject, but only a sensation of solid pleasure, we venture to say, that the "Scientific American" has been the greatest agent for rendering patents more valuable, and affording our inventors the means of being better remunerated, than any other influence or agency in our country. We are confident—for we know it is true—that patents have rapidly grown more valuable since it was established. This

is quite natural, for every week it carries the list of the new patents granted to all parts of the world, stating their claims, and illustrating from four to five of them in such a manner, that all can judge of their value. It is not too much to say, that no less than fifty thousand persons receive information through our columns every week, of from thirty to forty new improvements; therefore our people are becoming better acquainted with the works of our inventors and the value of their patents.

Another reason for the increased and increasing value of patents, is attributable to the desire of our Courts—the United States Judges—to do justice to inventors. We believe that our U. S. Courts are open to improvement, and would be all the better for it, but, at the same time, it is our firm and sincere conviction, that there is not a U. S. Judge on the bench who has not a strong and sincere desire to see justice done to our inventors. Let a plain and palpable infringement of a patent be presented to any U. S. Judge, and he will not hesitate an instant to grant an injunction, or demand bonds, for a correct account to be rendered by the infringer. Taking all these things into consideration, we agree with Dr. Gale, that patent property, is now "of great value." And this is right; for by the telegraph, locomotive and steamboat, millions upon millions are saved to our country every year, and so it may be said of all other inventions, such as sewing, weaving, washing, reaping, rolling machines, &c. We have no doubt, but every right-thinking man in our country will rejoice with us, that a better day has dawned upon our inventors, and that their labors have now become so valuable in the estimation of the community.

Re-Inauguration of the Crystal Palace.

The Crystal Palace in this City was reopened with very appropriate ceremonies on Thursday of last week. The pomp and display of high civil and military dignitaries witnessed last year, when the Exhibition was first opened to the public, and the total subordination of art and industry, to gaud and glitter, on that occasion, were amply atoned for on this one. It was an ovation to the genius of industry and art. There was a procession of the Association and citizens through the city which, as a whole, was a dead failure, as it should be, for processions, except upon very extraordinary occurrences, should be thrown to the moles and the bats. In our opinion they are foolish and unnecessary affairs. The ceremonies within the Crystal Palace, however, were in good taste; the only objection was too much *spouting*, a mistake which might have been avoided if the Directors had only employed one clergyman and one lawyer, instead of three of each class, to make speeches. Elihu Burritt, "the learned blacksmith," and Horace Greeley, were the only mechanics who made speeches. There was one idea on which most of the speakers seemed to dwell erroneously, and which Mr. Greeley corrected with great propriety, that was "the dignity of labor." Men talk much of the dignity of labor, but in itself, as we have often said, there is no dignity in labor; it is the person, the cause, and the motive, not the toil that confers dignity on art. "There is nothing in toil," said H. Greeley, "of any kind, that ennobles and dignifies its votary, unless it be the motive which impels him to pursue it." This is correct, strictly speaking, but there can be no doubt that some occupations have a mental elevating tendency, while there are others that have a degrading one. But so far as it relates to true worth, the couplet of Pope is good, and applicable to man in every condition.

"Honor and shame from no condition rise,
Act well your part, there all the honor lies."

The President of the Association—Professor Barnum—made a very good speech, but the most important part of it was the announcement of certain large prizes, which the Association have offered. They are as follows: 1st. A gold medal valued at \$1000, (or cash) for the most useful invention or discovery which shall have been patented, or entered in the U. S. Patent Office, this year, before next December, the said invention or discovery being exhibited by model, or sample in the Crystal Palace. 2nd. A like medal (or cash) to the artist, whose work shall be exhibited for three months in the Crystal Palace, and

which shall be deemed the most meritorious.—3rd. Five one hundred dollar medals (or cash) to five inventors whose inventions shall be patented, or caveated within this year, and exhibited in the Crystal Palace, and which shall be deemed the most worthy. 4th. Five medals of equal value (or cash) to artists, for the five best works exhibited. Juries are to be selected to examine the objects exhibited for prize competition.

In the evening there were also exercises, at which James Henry, of the New York Mechanics' Institute, made a short and very excellent speech, and the Rev. E. H. Chapin, delivered an eloquent and glowing oration. We think the exhibition will now be well and ably conducted; and that it will prove to be a source of enjoyment, and a means of social and intellectual elevation, to hundreds of thousands, we have no doubt.

The Crystal Palace is now open to visitors every day and evening, from 8 A. M. to 10 P. M., the admission fee being 25 cents.

New Process of Making Bread.—Important.

"A very remarkable exhibition took place recently at the Marylebone workhouse, London, by Messrs. Morlan, Martin, and Journet, a French firm, who undertook to demonstrate before a committee of the board of guardians that, by a peculiar modification in the fermenting process, the amount of bread from a given weight of flour could be increased to at least 50 per cent. This singular method was invented by a French gentleman, a pupil of Orfila.—Two sacks of flour were made use of, both under seal, and issued by the authorities of the workhouse. One of these was manipulated in the ordinary way, the other by the associated French manufacturers. The first sack converted into bread by the usual method, produced 90 loaves weighing 360 lbs. The second bag of flour, placed in the hands of the French bakers, produced 154 loaves, weighing 520 lbs. giving an increase of nearly 50 per cent. under circumstances very disadvantageous to the owners of the secret. The place, the oven, and apparatus were all new and strange to their workmen, who had many difficulties to contend with. It was admitted by the spectators that in consequence of such drawbacks, there was a considerable waste of bread in the oven.—There was a large attendance of scientific men as well as bakers from the country and city, who witnessed the process with the keenest interest.

This marvellous increase in production does not arise from any weighty substance mixed with the dough, as no extraneous ingredient can be discovered in the loaf by the most rigid chemical analysis."

[We have seen the above copied with eclat into quite a number of our daily and weekly cotemporaries, as something grand and wonderful in the line of new discoveries. It is a grand piece of nonsense.

In the first place, it is stated that the weight of the flour is increased by this process, from 360 lbs. by the old process, to 520 lbs. by the new. That is a gain of 160 lbs. coming from nowhere—something made out of nothing.—Who among us has the organ of credulity so large, as to believe that a London baker loses 64 loaves in every sack of flour? According to a good authority, 7 lbs. of flour yield 10 lbs. of dough and 8½ lbs. of bread.—(Accum.)

If there is a gain in this new process of weight in the bread, we suspect it is the water of the dough that is retained in it, consequently, those who purchase such bread, pay for water instead of flour. And in connection with this, let us say, that the process of working it must be effervescence, not fermentation, and in all likelihood some deleterious substance is employed, which takes up and retains more water than yeast. Thus in experiments made for the Analytical Sanatory Commission in London, bread with 2 lbs. of flour and the necessary quantity of water and yeast, had acquired, on its removal from the oven, 8½ oz. of water, while the same quantity of flour raised with an alum and soda mixture retained one ounce more of water. A few years ago, bread made by effervescence was quite fashionable, but such bread is not so easily digested, nor is it so pleasant as fermented bread.

Reform in Franking Letters.

The Postmaster General has issued instructions to all the officers in the Departments, Special Agents, &c., to enforce strictly the provisions of the Act of Congress in relation to the franking privilege. No person can frank a letter not written by himself or at his order under a penalty of ten dollars, and any person receiving a letter under frank, not entitled to receive it free, is required to give notice at the office where received, that postage may be charged. The franking privilege had grown into a foul and huge abuse, and we had oftendirected attention to it, from the fact of having received franked letters ourselves from persons who had no right whatever to the use of the privilege. So shamefully brazen-faced had it become, that franks were sold by thousands in Washington, thus robbing the Post Office of its legitimate revenue. It is well known that since the postage on letters was reduced by the late Act for reforming the Postage Laws, that the revenue of that Department has not been able to pay the current expenses. So serious, indeed, has this become, that a resolution was recently introduced into the House of Representatives, for again adopting the old postage rates on letters. We do hope that Congress will not take any such step in a backward direction. We are confident that the expenses of the Post Office Department have been enormously increased by an abuse of the franking privilege; and that by proper management and reform, these expenses may be so much reduced as to meet current expenses. We are glad to know that the Postmaster General has adopted stringent measures to enforce the law strictly, and whatever we have said, which has tended to direct attention to the evils mentioned, it affords us pleasure in thinking we have "done the State some service."

Roth's Anti-Chlorine.

Our attention has been directed to this new preparation for bleaching; but what it is and what are its beneficial qualities, we cannot tell. If it is superior to chlorine—less injurious to textile fabrics in bleaching—then we hail it as a most excellent discovery. We have received from George F. Wilson, of Providence, R. I., two samples of flax which were treated with this preparation for a few minutes; they look well, and so far as we can judge by their appearance, contrast favorably with samples operated upon by chlorine.

Universal Exhibition at Paris.

We are informed by our agent in Paris that the Exhibitors can guard their rights and obtain *gratuitous* protection for one year by sending on drawings and descriptions of their inventions to the Office of Patents. This protection will allow the invention to be worked, which the English regulations of 1851 did not. This is certainly a good feature, and will stimulate much activity among European inventors.

We are inclined to think, from present appearances, that the United States Department at the Exhibition of 1855, in Paris, will prove to be a slim affair. Little interest is felt upon the subject here, and owing to the great distance and the unsettled state of affairs in Europe, few contributions can be relied upon from this side.

An Ominous Fact.

Probably, the greatest number of applications for patents that was ever filed into the Patent Office by one agency in a single month, was made through the "Scientific American Office" last month. We filed no less than 58 complete sets of specifications and drawings into the Patent Office during the month of April, which averages over two cases for every working day in the month—exclusive of a number of caveats. Two facts are portrayed by the above item; first, inventors are plenty, and are vigorously securing their inventions; and secondly, that they know *where* to apply to get their applications—specifications and drawings—properly prepared.

It is estimated that nearly a million of dollars' worth of property has been wrecked on the Bahama Banks, within three weeks.