

Scientific American.

NEW YORK, SEPTEMBER 23, 1854.

Delays are Dangerous.

The above proverb, when applied to the performance of any duty, should never be lost sight of by any person for a single moment. That duty which should be performed to-day, should not be left undone till to-morrow, for who can tell what a day may bring forth—to-morrow may be one day too late.—Of the truth of these remarks, all are aware; and yet hundreds upon hundreds have to be continually reminded, that "procrastination is the thief of time." With respect to delays in securing inventions, many inventors know to their cost how much they have lost. By delaying until what they consider would be more favorable opportunities, or from carelessness, they have suffered others to snatch bright prizes from beneath their very pillows. We often receive letters from inventors expressing their deep regret for having delayed to secure inventions for which others had obtained patents. Last week we received a letter from B. R. Buckelew, of San Francisco, in which he states, that several patents had been recently issued to other persons for inventions originated by him, but the benefits of which he was deprived, in default of timely attention on his part. He, indeed, asserts that the delays in his case were caused by circumstances over which he had no control, the principal one being long-continued ill health. We feel deeply for an inventor when placed in such circumstances, and many such cases always will exist. But for one who has lost the benefits of his own invention from delays, on account of sickness, five have lost the benefits of theirs without the shadow of an excuse. One supposed he might not get a patent if he did apply; another who had invented a very intricate improvement, was perfectly confident that no other person had thought of the same thing, and he therefore waited until he was in better circumstances to attend to it. The third thought it best, by the advice of some imprudent friends, to use his invention in secret; the fourth thought his would not pay; and the fifth, that there was not much benefit to be obtained of a patent in any way. No person upon the mere doubt of not getting a patent, should fail to try and get one, if he is confident that his invention is a good one, and that a patent would be of advantage to him. In these days, when mind is so active, and in a country where there are so many ingenious men, no man should consider his invention secure, however intricate, until it is covered with the seal of the Patent Office.—He who thinks he can keep an invention secret, has greater faith in bolts and bars than we have reason to think he should have. No person who makes an improvement, however small, should fail to secure it, for he does not know how much remuneration it may bring him, until he makes reasonable efforts to introduce it. The inventor who believes that a patent for a useful improvement would not be of much advantage to him, may have been dismayed with the legal troubles of some patentees, but if he does not secure his invention for fear of some trouble, he places himself beyond the hope of ever receiving any reward. Many good things have been invented for which their authors never obtained any commensurate remuneration, and it is the fate of some men to toil, study, and produce all their lives, and yet fail to have their merits appreciated until they are mouldering with the clouds of the valley; in this inconsistent world such things always have been, and still may be expected. But as every inventor deserves to be recompensed for his invention, according to its usefulness and importance, and as the only way whereby he can receive the just reward of his discovery is provided for by law in the securing of a patent, wisdom certainly dictates the proper course he should pursue. As patents are granted only to first inventors, (those who can show priority,) let us say to every inventor who has com-

pleted an improvement, "if you ever expect to obtain any remuneration for your toil and trouble, delay not to obtain it, for delays are dangerous."

Theory of Storms—Predictions of the Weather.

Thomas Bassnett, of Ottawa, Illinois, author of a work published by Appleton & Co., in which he presents a new theory of the cause of storms, as was noticed by us in our last volume, has sent us a new pamphlet in which the predictions of the weather are given for this month. By this, we have a criterion to judge of the correctness of his theory. It is well known that a very severe storm swept over a large extent of our country between Thursday evening the 8th and Sunday evening the 11th inst. No such storm appears in Mr. Bassnett's column of predictions. The predictions of the weather are made for the localities of Cambridge, Mass., and Washington, D. C. The kind of weather of the 9th inst. for Cambridge is not given, but for the 8th it says, "rainy evening, squall from North;" and for the 10th, "wind round to North, clearing, fine at night." The predictions, if suitable for Cambridge, were not quite so good for this locality, as Robert Thomas' good old Farmers' Almanac.

For Washington, the prediction for the 10th is left out, but that of the 9th is given. It says, "wind north-west, cloudy from north, (after 3 p. m.)" Not a word is said about a storm. This prediction is very different from the actual weather, reported here by the telegraph. It commenced to rain at 12 P. M., in Washington on the 9th, and poured down in torrents for seven hours. In Philadelphia, Boston and New York, the rain fell in torrents, and the wind blew a hurricane from early on the morning of the 10th to noon. The theory of Mr. Bassnett contends for the existence of a universal imponderable medium, possessing great specific caloric, and inertia, and subject to all the laws of matter and motion, (gravity excepted,) and that there are a series of eddies or vortices in this subtle medium, produced by the center of the earth not being coincident with the axis of the ethereal vortex surrounding it. "The axis of the vortex," he says, "is inclined to the earth's axis, consequently these vortices following the moon in right ascension, are describing orbits, whose apogees are variously situated, and are caused to circulate over the earth's surface, between the average limits of 10° and 80° in both hemispheres, exempting the poles and the equator from hurricanes." He asserts, that all storms and atmospheric commotions are primarily due to the passages of these vortices.

We can easily conceive that a hurricane may be produced at one place by a vortex in a distant part of the atmosphere, and that storms could be caused by vortices in a medium surrounding our atmosphere, if there were such a medium. We, however, do not, and cannot conceive of any medium possessing inertia and yet devoid of gravity,—if it possesses the one quality, according to our judgment, it must possess the other.

Mr. Bassnett's pamphlet speaks of an expected storm about the 16th inst., but which, so far as we have learned, did not take place anywhere. On the 8th inst. the city of Charleston, S. C., was visited by one of the most terrific storms ever experienced in that place—it was a perfect hurricane, and did great damage; but Mr. Bassnett predicted no such storm. If he understands his own theory, and if it were correct, a fine opportunity was thus offered for gaining a reputation equal to that of the greatest philosophers. We have no doubt however but there is some regularity in storms; they appear to move in grand processions: thus, on the 8th Sept., 1804, Charleston was visited by a tornado equally as destructive as the last, which took place on the same date exactly, but with a distance of half a century intervening.

Gas from Wood.

I wish to inquire if gas cannot be made to advantage for illuminating purposes from wood where wood is cheap, or from the refuse chips and sawdust from the manufacture of lumber. If practicable I wish to make gas to light a small factory and a few dwelling houses near by. The charcoal will be of some value to me, as I shall use a large quan-

tity of that in a year, or if I could make it from the chips and sawdust from the saw mill I should consider the coal from that valuable as a manure. Any and all information respecting the manufacture of gas from wood, whether it can be made to advantage from any and all kinds of wood, whether gas thus obtained would have to be purified, and also a description of the apparatus for making the same.

JOSEPH POPE.

Windham, Me., Sept. 9th, 1854.

[We are not positive, but it is our opinion that gas could not be profitably made from wood in any part of our country. Two patents have been obtained within four years in our country, for apparatus to make gas from wood, one in December, 1851, by W. P. McConnell, and the other on the 22nd of last month by Lieut. Porter, U. S. N., and respecting which there has arisen some controversy between these parties.

The apparatus for making wood gas requires to be but little different from that for making coal gas; the gases of both have to be purified by passing them through a purifier containing milk of lime. The city of Heilbrom, in Germany, has been illuminated with gas made from wood since last December, but with what results—respecting economy—we cannot at present tell. We have often made gas from hickory, maple, and pine wood, for amusement and experimental purposes. Gas made from wood is an old affair, and a patent was obtained in France in 1800, by Philip Lebon, an engineer, for employing wood gas for general illumination, but he soon abandoned the enterprise. We believe that no wood but that of pitch pine is suitable for making gas; if that of any other wood it ought to be passed through turpentine, benzole, or naphtha, before it is used, to carbonize it. A cord of pine wood weighs 1,904 lbs., its composition is carbon, 49.95, hydrogen, 6.41, oxygen 43.64. Wood therefore contains far too much oxygen for the production of a good gas, the light carburetted hydrogen, (C.H.²) used in our cities being devoid of it. It has been found that in the destructive distillation of light-making substances, that 12½ parts of hydrogen can combine with as much carbon as 100 parts of oxygen, and as there are 10 parts of oxygen in wood to one of hydrogen, while in coal there is one of hydrogen to only .80 of oxygen (less oxygen than hydrogen) it follows that as carbon is the principal substance in the production of good white light, that wood is far inferior to coal in its very nature as a gas-making material.

We therefore have not the least idea of ever seeing wood employed for making gas on a large scale in any part of our country, where coal, oil, lard, or resin, can be obtained; we shall, however, present an engraving of Lieut. Porter's apparatus in the SCIENTIFIC AMERICAN in a few weeks.

The Smithsonian Institute Again.

The Albany Knickerbocker re-echoes the sentiments of the Hartford Times, and abuses the managers of the above-named Institute, because they discountenance a large and extensive library in Washington, they believing that it would be in opposition to the expressed sentiments in the Will of Smithson. It calls them "a lazy set of professors; too deficient in talent and industry to obtain situations in colleges." This is not true; no well-informed American would make such charges against the Secretary, whose discoveries in science have conferred honors on his country, and whose reputation is world-wide, and above reproach. While Professor of Natural Philosophy, &c., in Princeton College, he was solicited to take the Secretaryship of the Smithsonian Institute, and conferred honor upon those who solicited him by accepting their offer, not they upon him. We do not like to hear any of our countrymen slandered, more especially any of those who make our land beloved at home, and respected abroad. Smithson willed his fortune to our Republic to found an Institute "to increase and diffuse knowledge among men," and how in the name of common sense could a large and expensive library in Washington increase and diffuse knowledge among men? It would

be useful only to the locality in which it was placed. We believe this Institution might have been better managed, and we think it will hereafter, if sensible men be allowed to rule.

Clubs and Prizes.

Parcels of the SCIENTIFIC AMERICAN made up to go to places, where there are a number of subscribers, always reach their destination in much better condition than papers in single wrappers. This should be some inducement for single subscribers to try and get up clubs; or in small villages to try and induce one or more neighbors to become subscribing companions.

We are glad to have received evidence of a number of candidates having entered the field of competition for the prizes. The prospects of trade for mechanics are becoming brighter than they were a few weeks ago, and it is now believed that the next winter will not be half as bad for workmen as many anticipated.

Those who are candidates for the prizes, should not fail to solicit every man they know to subscribe; you ask nothing for favor, and you do not know who may or may not subscribe until you ask. For large clubs the amount to each for a year's subscription is a mere trifle in comparison with the value they receive for their money.

The People's Journal.

With the October number, just out, the distinctive issue of this beautiful work ceases, being henceforth merged into the SCIENTIFIC AMERICAN. All remaining subscribers are to be supplied with the SCIENTIFIC AMERICAN; those who are subscribers to both the People's Journal and our own paper, are requested to inform us of the fact immediately, in order that we may credit their subscription accounts with any amount due them from the People's Journal.

The last year's issues of the People's Journal form, bound, a complete book of near 400 pages, illustrated with no less than 650 elegant engravings. The general contents relate to Science, Mechanics, Agriculture, and all kinds of useful knowledge. The illustrations are profuse and excellent, which, with the interesting nature of the contents, give the work a lasting value. Price of the book, in paper covers, \$1.50; cloth covers, gilt, \$2. To be had at this office.

Chicago Mechanics' Fair.

The Seventh Annual Fair of the Chicago Mechanics' Institute will be held in that city next month, commencing on the 2nd. Information respecting the Rules, Regulations, &c., can be obtained by addressing the Cor. Sec'y, Geo. P. Hansen, Chicago. We hope the mechanics of Chicago will have a good Fair.

Beautiful Impressions.

We have received from Joseph Wilcox, of Ivy Mills, Pa., some beautiful specimens of impressions on prepared paper, of butterflies, leaves, grasses, and moss. Every line and every tint of the originals are preserved with such extraordinary fidelity that the microscope cannot detect a defect.

\$570 IN PRIZES.

The Publishers of the SCIENTIFIC AMERICAN offer the following Cash Prizes for the fourteen largest lists of subscribers sent in by the 1st of January, 1855.

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| \$100 will be given for the largest list, | |
| \$75 for the 2nd, | \$35 for the 5th, |
| \$65 for the 3rd, | \$30 for the 9th, |
| \$55 for the 4th, | \$25 for the 10th, |
| \$50 for the 5th, | \$20 for the 11th, |
| \$45 for the 6th, | \$15 for the 12th, |
| \$40 for the 7th, | \$10 for the 13th, |
| | and \$5 for the 14th |

The cash will be paid to the order of each successful competitor; and the name, residence, and number of subscribers sent by each will be published in the SCIENTIFIC AMERICAN, in the first number that issues after the 1st of January, so as to avoid mistakes.

Subscriptions can be sent at any time and from any post town. A register will be kept of the number as received, duly credited to the person sending them.

See new Prospectus on the last page.