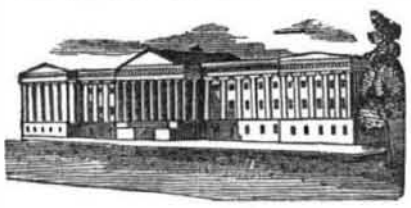

LIST OF PATENTS.

ISSUED FROM THE UNITED STATES PATENT OFFICE,

For the week ending April 17, 1849.

To Allen Eldred, of Openheim, N. Y., for improvement in Machinery for breaking and dressing Hemp. Patented April 24, 1849.

To H. M. Villeneuve, of Paris, France, by his adm'r. William O'Connor, of Jersey City, N. J. for improvement which consists in producing a substitute for Wool from Jute. Patented April 24, 1849.

To Epidaurus Irving, of New York City, for improvement in Tanning by Electricity. Patented April 24, 1849.

To Curtis E. Norris, of Peacham, Vt., for improvements in Machinery for Boring Bobbins. Patented April 24, 1849.

To Mary Ann Woodward, of Palmyra, N. Y. for improvement in Fan Rocking Chairs. Patented April 24, 1849.

To John J. DeHaven, of Reading, Penn., for Removable Fire Box for Locomotives. Patented April 24, 1849.

To Charles Foster, of Pompey, N. Y. for improved Forks for holding Rope Belts upon Drum Wheels. Patented April 24, 1849.

To Malcolm McAulay, County of Thomas, Geo. for improvement in Cotton Gins. Patented April 24, 1849.

To William C. Finney, of Fayette Co. Tenn. for improvement in Cotton Scrapers. Patented April 24, 1849.

To Gilbert Hatheway, of Rochester, Mass., for improvement in Saw Mills with cylindrical Saws. Patented April 24, 1849.

To John Whistler, of Carlisle, Penn. for improvement in Shoe Lasts. Patented April 24, 1849.

To Israel Kepler, of Milton. Penn. for improvement in Corn Shellers. Patented April 24, 1849.

To George Fletcher, Sen. of Greensburg, Ind., for improvement in Machines for Polishing Stone. Patented April 24, 1849.

To Paul K. Hubbs, of Holmesburg, Penn., for Filtering Apparatus for Steam Boilers.—Patented April 24, 1849.

To Abiathar Pollard and Simeon Minkler, of Clinton Co. N. Y. for improvement in Obstetrical Supporters. Patented April 24, 1849.

To Nathan Colver, of Boston, Mass. for improvement in Bedsteads. Patented April 24, 1849.

To Wm F. Converse and Jonathan Burdge, of Cincinnati, Ohio, for improvement in Machinery for cutting Screws on Rails of Bedsteads. Patented April 24, 1849.

To William B. Hibbard, of Boston, Mass., for improvement in Machinery for Spinning Hemp. Patented April 24, 1849.

To Samuel Huff, of New Vienna, Ohio, for improvement in Churns. Patented April 24, 1849.

To L. Aimable Prosper Jacques, of Cincinnati, Ohio, for improvement in Frame for Musquito Bars. Patented April 24, 1849.

To Lewis Brown, of Epsom, N. H., for improvements in cutting Cylinders for Bobbins, &c. Patented April 24, 1849.

To Charles H. Peck and Coleman Hicks, of St. Louis, Mo. for improvement in Planing Machines. Patented April 24, 1849.

To David Gay, of Bath, Me. for improvement in Portable Beer Fountains. Patented April 24, 1849.

To Francis G. Woodward, of Worcester, Mass. for improved method of fastening Railroad Switches. Patented April 24, 1849.

To Knight Reed, of New Haven, Conn. for improvement in Boiling Sugar. Patented April 24, 1849.

To Joseph E. Andrews of Boston, Mass. assignor to Edwin Allyn, of the same, for improved Variable Power Capstan. Patented April 24, 1849.

To J. R. Worster, of Baltimore, Md. for improvement in Diving Bells. Patented April 24, 1849.

To David Bonner, assignee of Joseph M. Toy, of Greenfield, Ohio, for improvement in machinery for Sawing Wood. Patented April 24, 1849.

To Cotton Foss, of Painsville, Ohio, for improvement in Machines for making Grindstones. Patented April 24, 1849.

To William T. Barnes, of Buffalo, N. Y. for improvement in Bellows. Patented April 24, 1849

RE-ISSUE.

To Hezekiah S. Miller, of Cincinnati, Ohio, for improvement in Machinery for making Felt Fabrics. &c. Patented March 5, 1839.—Re-issued April 24, 1849.

DESIGN.

To S. H. Ransom, of Albany, N. Y. for Design for Stoves. Patented April 24, 1849.

Poetry of Science.

BY ROBERT HUNT.

THE ELECTRICITY OF A TEAR.

We tremble when the thunder-cloud bursts in fury above our heads :—the poet seizes on the terrors of the storm to add to the interest of his verse. Fancy paints a storm-king, and the genius of romance clothes his demons in lightnings and they are heralded by thunders. These wild imaginings have been the delight of mankind :—there is subject for wonder in them :—but is there anything less wonderful in the well-authenticated fact, that the dew-drop which glistens on the flower, that the tear which trembles on the eyelid, holds locked in its transparent cells an amount of electric fire, equal to that which is discharged during a storm from a thunder-cloud ?

Faraday has shown, by the most conclusive experiments, " that the electricity which decomposes, and that which is evolved by the decomposition of, a certain quantity of matter are alike. What an enormous quantity of electricity, therefore, is required for the decomposition of a single grain of water ! We have already seen that it must be in quantity sufficient to sustain a platinum wire 1-104 of an inch in thickness, red hot in contact with the air, for three minutes and three quarters. It would appear that 800,000 charges of a Leyden battery, charged by thirty turns of a very large and powerful plate machine, in full action—a quantity sufficient, if passed at once through the head of a rat or cat to have killed it, as by a flash of lightning—are necessary to supply electricity sufficient to decompose a single grain of water ; or, if I am right to equal the quantity of electricity which is naturally associated with the elements of that grain of water endowing them with their mutual chemical affinity."

GRAVITATION.

Science has developed the grand truth, that it is by the exercise of this all-pervading influence that the earth is retained in its orbit —that the crystal globe of dew which glistens on the leaf is bound together—that the debris which floats upon the lake accumulates into one mass—that the sea exhibits the phenomena of tides—and the ærial ocean its barometric changes. In all things this force is active, and throughout nature it is ever present. Our knowledge of the laws which it obeys, enables us to conclude that the sun and distant planets are consolidated masses like this earth. We find that they have gravitating power, and by comparing this influence with that exerted by the earth, we are enabled to weigh the mass of one planet against another. In the balance of the astronomer it is as easy to poise the remote star, as it is for the engineer to calculate the weight of the iron tunnel of the Conway, or any other mechanical structure. Thus throughout the universe the balance of gravitating force is unerringly sustained. If one of the most remote of those gems of light, which flicker at midnight in the dark distance of the starry vault was, by any power, removed from its place, the disturbance of these delicately balanced mysteries would be felt through all the created systems of worlds.

LIGHT.

Light is necessary to life ; the world was a dead chaos before its creation, and mute disorder would again be the consequence of its annihilation. Every charm which spreads itself over this rolling globe is directly dependent upon luminous power. Colors, and often, probably, forms, are the result of light certainly the consequence of solar radiations. We know much of the mysterious influences of this great agent, but we know nothing of the principle itself. The solar beam has been tortured through prismatic glasses and natural crystals. Every chemical agent has been tried upon it, every electrical force in the most excited state brought to bear upon its operations, with a view to the discovery of the most refined of earthly agencies ; but it has passed through every trial without revealing its secrets, and even the effects which it produces in its path are unexplained problems still to tax the intellect of man.

FIRST KNOWLEDGE OF ELECTRICITY.

If a piece of amber, electrum, is briskly rubbed, it acquires the property of attracting to it light bodies This curious power excited the attention of Thales, of Miletus ; and from the investigations of this Grecian philosopher we must date our knowledge of one of the most important of the natural forces—Electricity.

If an inquiring mind had not been led to ask why does this curious vegetable product attract a feather, the present age, in all probability, would not have been in possession of the means by which it is enabled to transmit intelligence with a rapidity which is only excelled by that of the " swift winged messengers of thought." To this age of application a striking lesson does this amber teach. Modern utility would regard Thales as a madman. Holding a piece of yellow resin in his hand, rubbing it, and then picking up bits of down, or catching floating feathers, the old Greek would have appeared a very imbecile, and the *cui bono* generation would have laughed at his silly labors. But when he announced to his school that this amber held a soul or essence, which was awakened by friction, and went forth from the body in which it previously lay dormant, and brought back the small particles floating around it, he gave to the world the first hint of a great truth which has advanced our knowledge of a physcial phenomena in a marvellous manner, and ministered to the refinements and to the necessities of civilization.

Antiquity of Gunpowder.

The first application of Gunpowder to the firing of artillery has been commonly ascribed to the English at the battle of Cressy, August, 1346 ; but hitherto this fact has depended almost solely on the evidence of a single Italian writer, coupled with the circumstance that the word " gunners" has been met with in some public accounts of the reign of Edward III.—Upon this point the Rev. J. Hunter has lately communicated to the Society of Antiquaries some new and curious particulars, derived from records of the period, showing the very names of the persons employed in the manufacture of gunpowder, (out of saltpetre and "quicksulphur," as it was called, without any mention of charcoal,) and the quantities supplied to the King just previously to his expedition to France in June or July, 1346. In the Records it is termed *pulvis pro ingenis ;* and they establish that a considerable weight had been supplied to the English army subsequently to its landing at La Hogue and previously to the battle of Cressy ; and that before Edward III engaged in the siege of Calais, he issued an order to the proper officers in England requiring them to purchase as much saltpetre and sulphur as they could procure.

The Age of the World.

Mother Earth, like other ladies of a " certain age," puzzles her sons to discover " the years of her life." The common notion is that she is some five or six thousand years old speaking of her, that is, as the abode of Man. But what will the old women say to the editor of the Ethnological Journal, who, in his August number, contending that Britain was a civilized country at some remote period anterior to the Roman invasion, coolly observes : —" That this civilization should have so completely vanished before the days of Cæsar, is no degree surprising : the mightiest empires have been utterly swept away, and the most important histories completely forgotten, in a less space of time than 'nine thousand years.' " Yes, indeed the world may be excused, without the reproach of carelessness, for dropping a page or two of its history in ninety centuries.

LITERARY NOTICES.

The New York Pathfinder is one of the most valuable business journals in this city.—When this publication commenced we wished it success, but feared that the public would not appreciate its usefulness. But it has now nearly completed its 3d volume, and has a circulation nearly, if not quite equal to that of any other daily published in this city. It is an excellent medium for business men to advertise through, as you can scarcely step on board a steamboat or railroad car without finding numbers lying about for the attention of travellers. The articles are well written, and are creditable to the editor (Mr. Charles S. Todd) a very modest, unassuming gentleman.

The Pathfinder is also published in Boston by the same proprietor, Mr. Bartlett.

The May number of Godey is beautiful indeed, and it will be hardly necessary to say one word in its favor. " The Rose and Lilly" by Ellis, is a beautiful engraving, and is followed a colored plate, of " Children's Fashion" by Pease. " Thirty five," before or after marriage, we are not informed which, by Mrs. Hall the sweet poetess. " The Pilgrims to the Shrine," a scene from Mount Calvary. which is very solemn and impressive. This number contains 29 distinct engravings, all highly creditable to the Artists skill. The contributions are exceedingly interesting, from the pens of well known authors. Persons wishing this work, can find it at H. Long & Bro. 46 Ann Street, also a general assortment of all the new publications.

Holden's Dollar Magazine for May, as usual is an excellent number, the embellishments are " The Port of Honolulu, in the Sandwich Islands," " The Welcome Home," A Portrait of Father Mathew the great apostle of Temperance, and a faithful likeness of the eloquent " Dr. Durbin" accompanied by a well written biography.

The literary contents, for originality is not surpassed by any other Magazine published. Holden indulges very little in wild romance, and his selections are calculated to instruct as well as amuse.

Some clever author has commenced " Dissecting the Doctor" and he really turns the tables upon them in a capital manner. " The Toilette and its devotees" is a very common sense review of the distinguishing feature between " man and the lesser orders of creation." We commend this No. to the particular attention of his readers, they will find much to interest them.

The Western Continent is the title of a large and ably edited weekly Literary Journal published in Baltimore at $2, per annum.

The Literary Union, an " Independent in everything," Journal has been sent us by the publisher, W. W. Newman, Syracuse N. Y.—We should think it a very interesting and useful paper, and not a wit behind literaries of ten times its age.

No. 15 of the Encyclopedia of Chemistry is just issued by Messrs, Carey & Hart of Philadelphia. Those who desire to possess a comprehensive and compact work on Chemistry as it is, in its present advanced state, will find this work the very thing to suit them.

Charms of Rural Life.

Besides the benefit of mental discipline derived from the study of nature, for which agriculture opens as wide a field as any other pursuit, the charms of rural life are unalloyed by the reflection of ill-gotten gains, and uncontaminated by immoral influences. The farmer has no occasion to review with remorse, a life of injustice to his fellow-men, or mourn the loss of fortunes accumulated by an occupation almost necessarily dishonest. The lawyer looks upon his briefs prepared for unjust causes ; the physician upon the emaciated forms of his patients, and the speculator upon the wealth amassed from the ruined fortunes of others, with the humiliating consciousness that they have not in all instances, returned an equivalent for what they have received. But the cultivator of the soil may pursue his calling with the cheering reflection, that an all-bounteous Providence has rewarded his efforts, and through him bestowed more of happiness upon his fellow-men.

A New Aristocrat.

The heir of the Earldom of Angus (a title of the Douglass family) has been discovered to be an old gardener at Capetown, who calls himself Dalgleish. The Queen means to give him the Earldom, and its income of £30,000 a year.

He should get a bit of a decent farm, and the rest of the estate should be given in 50 acre lots to the tenants and poor of the parishes.

Many inventors have written to us to advocate a mechanic for Commissioner of Patents, as a right.