

**Francis Bacon.**

This philosopher was the English contemporary of the great Galileo, whose biography we have already published. The name of Bacon is familiar to all, but there are not many who are acquainted particularly with his history. The following memoir, therefore, will be of much interest to many of our readers:—

Francis Bacon was the youngest son of Sir Nicholas Bacon of London, at whose mansion in the Strand, he was born in 1561.

When a boy, he seems to have been about the court, and received some notice from Queen Elizabeth, for his ingeniousness and intelligence. At the age of thirteen he was sent to Trinity College, where he studied with diligence and success. At the age of sixteen, according to Dr. Hawley, his chaplain and biographer, he formed a dislike to the philosophy of Aristotle; not for anything worthless of the author, but because he thought it "a philosophy only strong for disputations and contentions, but barren of the production of works for the life of man."

On leaving Cambridge he entered Gray's Inn as a student of law, where he was made an ancient on the 21st of November, 1576; and, as his attendance was not required in London for some years, he went to France in the suite of Sir Amias Paulett, the British Ambassador to that court. His superior sagacity recommending him to the ambassador he was sent home with an important message to the queen. On his return to France he devoted considerable time to examining the country, and collecting information on the characters and resources of the European princes; which information he arranged at the age of nineteen, into a work "On the State of Europe." In this early effort of inherent genius we have decided evidence of the depth of penetration, industry in research, and solid judgment, which, in later years, made him great among modern philosophers.

On the death of his father, by which he was left almost wholly unprovided for, he returned to England in 1579, and applied himself to the study of law and philosophy. In both of these departments of study he made great progress, and in June, 1582, he was called to the bar. Some of Bacon's biographers assert that the dry details of legal investigation were unsuited to his lofty genius, and that philosophy being more congenial to his spirit, attracted the largest share of his attention. This might be: and certain it is, that he studied philosophy with more than common assiduity; for when a student in Gray's Inn, he published a piece entitled "the Greatest Birth of Time," in which his great work the "Organon," is sketched—yet he was by no means either careless or undistinguished as a member of the legal profession. In 1580 he was made a bencher, and at the age of twenty eight, was appointed counsel extraordinary to the queen, besides receiving several other legal appointments in rapid succession.

Although connected with the most powerful family of Elizabeth's reign, Bacon's prospects of state preferment were considerably marred by the opinions entertained of his speculative disposition. His mind was too far advanced for the age he lived in, and his genius too original and gigantic to be appreciated by the men of his time. Hence he was looked on, to a certain extent with an eye of suspicion, and the Cecils, with whom Bacon was nearly related, jealous of the zealous friendship which he had early evinced for their great rival the Earl of Essex, then in the decline, operated rather to hinder than advance the interest of Bacon at the court of Queen Elizabeth. All that the Cecils ever procured for Bacon was the reversion of the office of registrar of the Star Chamber, which however, yielded him no emolument until 20 years afterwards. Essex endeavored to procure for him the office of Solicitor General; but failing in this he made Bacon a present of Twickenham park, worth £1800.

Bacon's friendship for Essex was of a most sincere character. Notwithstanding the opposition of powerful relations, he attached his elder brother to the interest of this nobleman, and although a coldness subsequently ensued in consequence of a difference of politics, and the line of policy which Essex pursued, when

ruin closed around the unfortunate Essex, Bacon still evinced the friendship of former years and by application and entreaty to the queen, strove to avert the fate to which Essex was afterwards subjected. In virtue of his office Bacon had to appear as one of her majesty's counsel against his former friend. Instead, however, of attaching any blame to him for this, it must rather be considered a duty from which he could not escape, and which afforded opportunity of befriending the accused earl. The declarations of treason against the Earl of Essex, which Bacon had to draw up by command of the queen, were so mollified by early friendship as not to suit the purposes of the earl's accuser's, and caused the vindictive Elizabeth to remark, "I see old love is not easily forgotten."

In 1592, Bacon was returned to parliament for the county of Middlesex, and distinguished himself in the debates, by taking the popular side. From this time till the accession of James I. Bacon's pecuniary circumstances were very bad. He was twice arrested for debt, and failed in an attempt to form a matrimonial connexion to relieve his difficulties.—He published several works on political and legal subjects, some of which have been characterized as too much eulogistic of his royal mistress.

Upon the accession of James I., Bacon received the honor of knighthood, and at this time his eloquence and information gave him great weight in the House of Commons. From the prudence and boldness with which he represented the oppressions of the royal purveyors, he received the thanks of parliament, and was appointed one of the counsel to the king. With the latter appointment he received a pension of £50 per annum. Notwithstanding the opposition of Cecil, now Earl of Salisbury, and the rivalry of Sir Edward Coke, the attorney general, he continued to rise both in royal favor and the good graces of the nation at large.

In 1605 Bacon published "The Advancement of Learning." Two years afterwards he was appointed solicitor general, which office he fulfilled with distinguished success.—His practice in Westminster Hall extended, and he received a large fortune by marriage with the daughter of Benedict Barnham, Esq., a wealthy alderman of London. His parliamentary labors still added to his popularity, without lessening his interests with the crown. Neither public nor professional labors, however, lessened the assiduity with which he pursued the study of philosophy. He published his "Cogitata et Visa," which formed the groundwork of his "Novum Organon Scientiarum," and sent copies to his learned friends for examination and criticism.

(To be continued.)

**Platina Metal.**

This metal was formerly of more value than gold. But the platina mines of Russia have furnished such an abundance of the ore, that it is now next to gold in value. It is a metal, color whitish silvery—the heaviest, the most difficult of fusion, the most ductile, and the most flexible of the known metals, having a specific gravity of 21.5, and capable of being hammered into leaves, or drawn into wires, of extreme tenuity. Its hardness is intermediate between that of copper and capable of being welded at a white heat, either one piece to another, or to a bit of iron or steel. It is not in the least affected by the air or water, and it is not attacked by any of the pure acids; but is dissolved by chlorine and nitromuriatic acid.

In beauty, ductility, and indestructibility it is hardly inferior to gold. When a perfectly clean surface of platinum is presented to a mixture of oxygen and hydrogen gas, it has the extraordinary property of causing them to combine, so as to form water, and often with such rapidity as to render the metal red-hot. Platinum was discovered about 1741; but it attracted little notice until the mode of purifying it, and rendering it malleable, was discovered by Dr. Wollaston. It is found in the metallic state in Brazil and Peru; at Antioquia in South America; and Estremadura in Spain; and latterly in considerable quantities in the Uralian mountain, and in California. Its appearance, in the rough state in which it is imported, is that of small grains

or scales, of a metal lustre, darker than silver, and extremely heavy. In this state it is combined with palladium, rhodium, titanium, iron, gold, or other metals. The particles are seldom larger than a pea, but pieces have been found as large as a hazel nut; and in 1831, a mass of native metal was discovered in Demicloff's gold mines in Russia, weighing upwards of 20 lbs.

The perfection with which vessels of platinum resist the action of heat and air, of most of the acids, and of sulphur and mercury, renders them peculiarly valuable in many chemical applications; so that notwithstanding the high value of the metal, which is between four and five times its weight of silver, it is now much employed for crucibles, retorts for the distillation of sulphuric acid, mirrors for reflecting telescopes, by gunsmiths, and others. Its property of being welded either one piece with another, or with iron and steel, admits for many useful applications in the arts. From its scarcity and indestructibility, it has been proposed to use it for coinage; and we believe coins of the respective values of 3, 6 and 30 silver roubles are now current in Russia.

**The Use of Quinine at the West.**

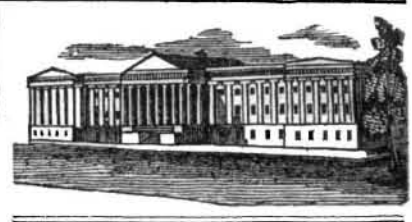
A medical correspondent of the Surgical Journal, writing from the West, says: The immense quantities of quinine sold here would astonish an Eastern dealer in drugs. Five hundred ounces by one druggist in a small village are often disposed of in a few days, and in the larger towns fifteen hundred or two thousand ounces are no uncommon sale by one house from twelve to thirty weeks. In speaking of the fever, or fever and ague, as it is called, for which this medicine is used, the same writer says, that though generally prevalent, and in some seasons almost universal, (as in 1848, when every person, man, woman and child, were down with it), yet the mortality as compared with fevers at the East, is as one to fifty. When a man is seized with the chills, the physician prescribes sixty grains of quinine in six equal doses, and if he is very restless adds one eighth of a grain of morphine to one of the powder, perhaps the first, and generally in twenty-four hours, the patient is well. But without this invaluable medicine, the patient is often down for weeks and even months.

**Lyons in France.**

Lyons is the centre of the great silk manufacturing region of France. It has a population of nearly 200,000, swarming through the lofty irregular houses which crowd and darken the narrow, crooked and filthy streets.

The silk manufacture was begun there in 1450. There are no large buildings: like cotton factories, where the work is carried on—everything is done in private houses. The proprietor gives out the work all prepared for weaving, and it is brought home to him when it is finished. A draughtsman, usually a minor partner, is constantly employed in getting up new patterns, and it is the special business of another artiste to lay in the piece. There are in operation in and about Lyons, not less than thirty one or two thousand silk looms, or about one to every six or eight of the population. The houses in which the work is carried on, are dark, close, damp and filthy—the living is of the poorest kind, and the whole weaving population is wretchedly depraved, both physically and morally. Of the men who are of a proper age for military service, at least one-half are exempted by weakness, disease or deformity, and the females can boast no superiority whatever over men.

As one winds his way along the streets, he looks in through the open windows upon pieces of glossy silk in the loom, of bright, gay colors, and he sees leaning over the beautiful web, and plying the shuttle amidst the delicate threads, some gaunt and haggard form, whose sunken eye glares mechanically upon the growing robe of some proud Duchess, and whose long, lank fingers go thoughtlessly to their places, as the quick click of the shuttle gives notice of its movement across the piece. For a few sous a day, weary and hungry, and sick, these wretched beings toil on for the decoration of those who can scarcely believe that there is such a thing as misery in the world.

**LIST OF PATENTS.**

ISSUED FROM THE UNITED STATES PATENT OFFICE,

- For the week ending March 20, 1849.
- To William T. Barnes, of Buffalo, N. Y. for improvement in apparatus for raising water. Patented March 20, 1849.
- To J. T. Farrand, of Port Byron, N. Y., for improvement in apparatus for drawing water from wells. Patented March 20, 1849.
- To Freeman F. Merrick of Lynn, Mass. for improvement in tide Water Wheels. Patented March 20, 1849.
- To Tilley and W. Flint, of Westford, Mass. for improvement in Steel yards for weighing. Patented March 20, 1849.
- To T. J. Wells of New York, City, for improvement in Planing Machines. Patented March 20, 1849.
- To R. M. Bouton, of West Troy, N. Y. for Machine for making percussion Caps. Patented March 20, 1849.
- To Thomas G. Boon, of Brooklyn, N. Y., for improvement in carding machines. Patented March 20, 1849.
- To John N. Dearborn of Boston, Mass. for improvement in Cooking Ranges. Patented March 20, 1849.
- To John Spangenberg, of Jefferson Parish, La., for improvement in Draining and Blanching Sugars. Patented March 20, 1849. Antedated September 20, 1848.
- To Edward Saterlee, of Albany, N. Y. for improvement in processes for burnishing metals. Patented March 20, 1849.
- To John P. Hayes, of Boston, Mass., for improvement in portable hot air Furnaces. Patented March 20, 1849.
- To Harvey Houghton of Truxton, N. Y. for Bell Telegraph. Patented March 20, 1849.
- To Caleb Winegar, of Springport, N. Y. for improvement in Magnetic Telegraphs. Patented March 20, 1849.
- To S. W. Aikin, of Spring Hill, Tenn. for improvement in Cotton Cultivators. Patented March 20, 1849.
- To Oliver Tiffany, of New York City, for improvement in air heating Furnaces. Patented March 20, 1849.
- To E. L. Mathewson, of Hartford, Conn. for self-adjusting Railroad Switch. Patented March 20, 1849.
- To Job. Johnson, of Brooklyn, N. Y., for improved Spring Snap Hook. Patented March 20, 1849.
- To C. Walker and G. Wilson, of Chester Vt., for improvement in the manufacture of paper veneers. Patented March 20, 1849.
- To Julius King, of Bordentown, N. J. for adjustable cut off. Patented March 20, 1849.
- To D. H. Chamberlain, of Boston, Mass., for improved sliding wrench. Patented March 20, 1849.
- To Jos. P. Woodbury, of Boston Mass. for improvement in Planing Machines. Patented March 20, 1849.
- To Daniel H. Solliday, of Northern Liberties, Pa. for improvement in Gas Burners. Patented March 20, 1849.
- To Israel Jackson, of West Grove, Pa. for improvement in hanging carriage bodies. Patented March 20, 1849.
- To Geo. Yerger, of Philadelphia, Pa. for improvement in Surgical Apparatus for fractured or injured Ankles. Patented March 20, 1849.
- To Daniel R. Pratt, of Worcester, Mass. for improvement in springs for carriages, &c. Patented March 20, 1849.
- To J. no. Wright, Rochester, N. Y. for improved Machine for turning a lock in Sheet metal. Patented March 20, 1849.
- RE-ISSUES.
- To Geo. P. Mason, of Williston, Vt. for improvement in preparing wool and cotton for Carding. Patented Sept. 4, 1847. Re-issued March 20, 1849.
- DESIGN.
- To S. W. Gibbs, of Pattonsburg, Va. for Design for Stoves. Patented March 20, 1849.