

bitterness, "*O tempora! O mores!*"—the mothers of "our girls" to-day are often as light and trifling as their daughters. What with their art of dressing and beautifying, and making youthful that which is *passé*, it is difficult sometimes to tell mother from daughter. Apron-strings, indeed! who hears of them now? It is jaunty hats, becoming costumes, and bewildering coiffures; as for strings, the only kind they think or prate of are those which tie their pull-backs and paniers!

Oh, mothers, pause an instant. To what end will this lax freedom in time drift your daughters? It is fair and pleasant and right to give them your confidence and trust; but, we pray you, put on some aprons once more, and tie our girls fast to obedience, duty, dignity, and honor. Let us have the old time reign and fashion of aprons—and apron-strings!

## Blades of Grass.

BY A MOTHER.

DURING the week the thought occurs to me, Sabbath will be a long day, I will have leisure, I will read. This thought sends a flush of pleasure through me. Sabbath after Sabbath disproves it, I neither have leisure nor read. Shall I rise up and condemn the life that denies me the pleasure I'm fond of?

There is a philosophy deeply ingrained in me. It is that in all things inexorable there lurks a blessing, if we have patience to pick it out.

Now in this life of motherhood that demands so much of sacrifice and exertion there is what many fret and struggle against as beyond endurance; it is the encroaching on time until all individual cultivation is threatened.

We fret for books. Suppose we, not being able to read, make what we might call a book of our children, and read and study it. If the mind be attentive it will find interest, instruction, great variety, and amusement. I hold there is no book that will so enlarge and embolden the mind.

Do we pine for music? But surely the mastery of guitar, harp or piano, will not compare with the mastery of that heaven-made instrument, a child's voice! Devise ways to produce that most ravishing of all music, a child's laugh. A mother so accomplished is a rare mother and to be desired, with many she would be held of greater worth than the Nilssons and Pattis.

Society! Yes, we mothers confined so at home think longingly of social pleasures. But consider if there be any society more pure than that of children; exercise your wit to make a society of your family, wherein to practice all social amenities; it will prove more satisfactory than that of the world, because it is genuine and trustworthy.

Sometimes when life presses hard upon us, as though it were an enemy powerful, inexorable, and exhaustless of resources to wound and destroy, we feel ourselves on the verge of losing faith and enthusiasm, and entering that multitude in the great march of humanity, the negative and commonplace; wearied high to exhaustion we are tempted to accept disappointment, cease thought, prayer, and effort, drop hope, let faith sleep, if not die. God help us at such times, help us to continue to study, pray, and strive, to hunger, thirst, hope, and believe.

There are some who create their misery by conjecturing it, who hasten it by anticipating it, who confirm it by consenting unto it.

There is such a thing as an intimate, enthusiastic faith in God. Obstacles and disappointments are eluded; the heart prays, watches, and will not let go, giving thanks for every indication of fruition, giving no heed to delay and seeming utter denial.

When we pray we *must* watch in the same with thanksgiving.

## Hair-Pins and Boots.

"WHY is it that when a man prepares to retire, it is always his boots which he relieves himself of first, while a woman begins at her hair-pins?"

Newspaper Query.

WHAT HAIR-PINS HAS TO SAY ABOUT IT.

Ah! that hot, crooked hair-pin! There! I hope I've thrown it where it will never be picked up! It's actually been buried in my scalp the livelong evening. What a relief it is to get down and off one's back-hair! What do I wear any for? Oh, yes, I dare say you'd like to see your wife going round with a little "wisp," as you called Mrs. Bald's *coiffure* the other night. Don't I wear all these puffs and braids and curls in order to do you credit? I'm sure it would be much more comfortable to go *au naturel*, and just twist up a simple knot with a comb and be done with it; but how you men would stare and hoot. "Don't make a guy of yourself, pray," you said yourself the other day, when I just innocently tried a Diana knot!—and so you see we women are obliged to be martyrs to puffs and hair-pins in order not to offend our husbands' tastes! Such a headache as I have got! I've been trying all day to "do over" in my mind last season's dresses, and I'm about crazy. When fashions have the hardihood, not to say cruelty, to jump from one extreme to the other, how ever is one, pray, to make ole clo' into new? No wonder my head aches. And then there are the children's school studies; what with Minnie's algebra, Bertie's Latin, and the boys' dreadful books—I declare it's positively cruelty to animals to cram and push children as they are doing at present. My head aches for them, and if we could only afford it I'd have them taught at home! Oh dear, my brain is in a whirl about to-morrow. "Sufficient unto the day?" Oh, yes, it sounds very well *quoted*, but if I *didn't* have a thought about to-morrow's dinner, what would you say then, hah? What am I worried about? Why, Nora wants to go to a funeral to-morrow, and no doubt will stay to the wake. Have the wakes before the funeral, do they? Well, she'll stay to something, and be gone all day, and the Drews are coming to dinner, you know, and Bridget is so green, and the dinner will be a failure. Oh dear, my head! No wonder we women "begin at the hair-pins!"

BOOTS' EXPLANATION.

Confound that stocking! I vow I'll never wear another darned pair. Oh, you needn't elevate your eyebrows, I put a proper consonant in the middle of the adjective my dear. Why can't stockings be mended smoothly? Actually there's a double rosette on the bottom of this one; how can a man be "amiable" who has walked on that in tight boots all day? Why don't I wear large, easy boots? Oh, yes, and if I *should* you would laugh and make all manner of fun of me, as you did of Mr. Pontoon. I keep myself *bien chaussé* because you say you like to see a gentleman's feet look neat and trim. Been on the street all day trying to raise some money; never knew such tight times, tight as that boot—ugh—Never mind, it *didn't* hit the mirror! If I've walked one, I've walked fifty miles to-day, and my feet ache as hard as your head. You women, sitting at home in your easy-chairs, all crimped and puffed, have no idea how we men suffer, battling for your comfort, out on the street, earning by the sweat of our brows your bread and butter—and back hair—and in—ach—tight boots too! Toss my slippers, will you? Thanks, my dear. No wonder we men always "begin at our boots!"

## Women of Yesterday and To-day.

MADAME LE BRUN.

AMONG the many illustrious names which Paris has given to the artistic world, shines brilliantly that of the admirable woman whose name heads this paper. It has been said of her that she secured more social triumphs and made fewer enemies than any other prominent personage of her time, and this in the face of the fact that she lived during one of the most troublous periods of French history, and that her own private life was not free from its unpleasantnesses. She had a reputation that was European—her work lives to this day in the galleries of Italy, Germany, Austria, Russia, France, and England; and of her marvelous capacity for work we need do no more than state that she gave to the world no less than 650 portraits, 250 landscapes, and 15 *genre* pictures, and that at the age of eighty she painted a portrait of her niece which was fully up to the standard of her finest work.

Marie Louise Elisabeth Vigée was born in Paris, April 16, 1755, and died there March 30, 1842. Her father was a painter, a member of the Academy; of her mother little is known. When she was about twelve years old, her father, M. Nigée died, and shortly thereafter her mother married a second time, the gentleman being a wealthy goldsmith. The mother and daughter had been somewhat reduced in circumstances since M. Vigée's death, and the young girl had contributed not a little to their joint support by giving lessons in painting among their more intimate friends. The daughter, although not particularly liking the idea of her mother marrying a second time, thought that, seeing her step-father was so rich, she would be able to give up her work and devote her time to improving herself in her art. But it was not to be; her step-father proved to be of a most niggardly disposition—even to wearing the clothes of M. Vigée, which last inspired intense disgust on the part of the high-spirited girl; and the only thing he may be said to have done for her was the exhibiting her first portrait, which attracted great attention, in his shop window, whereby she became much sought after.

Possessing, as she did, undoubted talent, we are not surprised to find her making rapid progress in the favor of the brilliant society of the period.

She was introduced to the notice of the unfortunate queen, Marie Antoinette, with whom her intercourse was of the most friendly and happy nature. Indeed, it was the misfortunes of the unhappy royal family, with whom her relations had been very intimate, that drove her to leave France at the commencement of the revolution of 1789.

Previously, however, she had met M. Le Brun, the celebrated art critic and amateur painter. He was much smitten with her beauty and accomplishments; for though during childhood she gave no promise of future beauty, but, on the contrary, seemed doomed to plainness, yet before she was eighteen all this was changed, and she was one of the prettiest girls in Paris. Partly at the solicitations of her parents, who thought the match would be a good one for the girl, and partly because she was, at that time, entirely heart-whole, she consented to marry M. Le Brun, which event took place in 1775.

At this time Madame Le Brun was well and favorably known as a painter, and her brush brought her in a very handsome sum yearly. But she seems, in two cases at least, to have been the victim of avaricious men, and this being the character of M. Le Brun, there is little wonder that the marriage

was an unhappy one. He made no scruple of converting her earnings to his own uses; on many occasions he would collect sums due her, and never tell her of the fact until she would find it out for herself by going to the persons with her bill. His plea always was that he was poor and greatly in need of money. One would think that self-respect would have forced him to leave her earnings at her own disposal. Except for a few years after their marriage, and for a short time after her return to France, they lived apart.

In 1789, the revolution having rendered Paris unsafe for all who had been known as friends of the royal family, she left France for Italy, and did not return for many years. While at Naples she painted a portrait of the notorious Lady Hamilton who so infatuated Lord Nelson, and she subsequently visited nearly all the countries of Europe. In Russia, particularly, she met with a most cordial reception from the nobility and royal family, and painted many portraits. In England her visit was equally successful. While in London she painted the portraits of the Prince of Wales and of Lord Byron. In doing the former, however, she incurred the enmity of the famous Mrs. Fitzherbert, the lady whom the Prince of Wales, afterward George IV., came so near marrying.

It should be mentioned that, just before she left France, she had been gratified by unanimous election to the Academy, to which honor but a very few women had been before admitted, and which was afterward denied to the sex. This honor was also accorded her by the academies of Rome, Turin, and Vienna. One of her best portraits, in the French National Gallery, is that of Madame de Staël in the character of Corinne. It is said that Madame Le Brun thought this her best effort.

Many are the anecdotes told of her and her friends.

While at Naples she painted a couple of panels for Lord Hamilton's summer-house, and presented them to that nobleman. What was her surprise, while in England, on a visit to a country house, to see these two identical panels, which it appeared Lord Hamilton, with a cupidity which is unexplained, had cut out of the door on which they were painted, and sold to their then owner.

Previously to her leaving Paris in 1789, the friends of the royal family were closely watched—oftentimes by those whom they supposed to be their friends, but who were in reality spies. Madame Le Brun gave a little entertainment to a few artist friends, gotten up in a very artistic style, but the cost of which did not exceed fifty francs. To her surprise, when in Russia some years subsequently, she was charged with having spent many thousand francs upon this same entertainment, and traced the scandal to one whom she supposed was her true friend.

She had difficulty in leaving France, as all the routes were watched by the Republicans, and all Royalists were stopped. On her arrival in Switzerland, however, what was her surprise and dismay to be accosted as Madame Le Brun. She was in mortal fear lest she was to be taken back to France, but her mind was soon set at rest on being told, what she had not suspected, that her reputation as a painter had preceded her so far from home.

Her only child, a daughter, who inherited her mother's beauty, and who was with her in all her travels, had much the same fate as herself in her married life. While in Russia she became infatuated with an attaché of one of the embassies, a man of good family, but very poor. Her mother, who could deny her nothing, deplored the attachment, but at last gave her consent. As a result, she had to support the young couple for many years, in addition to sending various sums to M. Le Brun, and providing for herself. Truly she may be said to have had her hands full.

## The World of Science.

### THE EARTH'S EIGHT MOTIONS.

BY L. P. L.

SEATED one Sunday afternoon by an open window overlooking the play-ground of the School of Saint Louis, Paris, I was startled from my reading by hearing my little boy exclaim: "See, mamma, there is a balloon!" It was indeed so near that it seemed in danger of brushing against the house-top, though men in the car were emptying out sand-bags in order to rise higher.

Its motion was very deliberate, yet it made me think of the balloon sent up from the same city immediately after the coronation of Napoleon. Released from its moorings at eleven o'clock in the evening, it descended at seven o'clock the next morning near Rome, Italy, eight hundred miles distant, having made an average progress of one hundred miles an hour.

The earth is not unlike a balloon in the way in which she is careering through the heavens, though her speed is as immense as her bulk is enormous, when compared with any gas-inflated ball.

However, contrasted with the sun and many of the planets, the earth is not large, neither is her progress rapid or steady. As she rolls along in her course, eight distinct motions are connected with her. To form an idea of the rapidity with which the earth is darting through space—more rapidly than the fleetest and most powerful bird moves through the air, more swiftly than the unseen rush of the two-thousand-pound shot at the moment when it leaves the mouth of the immense Armstrong gun at Shoeburyness—let us fancy ourselves on some planet which the earth is to approach closely, yet safely.

That small star shining in the sky is the approaching earth. It grows larger as it comes nearer; it swells to the size of the moon we have so often watched on a winter's night, or when flooding the world with her mellow light during harvest time; now we can trace the unfolding landscapes as the rich green of the tropics change into the more sober tints of the temperate zones and then fade away into the pure white of either pole, until lo! the whole heaven is filled with the mighty, noiseless, on-rushing mass, the sun is blotted from the sky, and in the blackness of darkness which follows we feel sure our latter end is come, and wait with awe-stricken hearts the impending crash.

But no collision comes, the sky grows light, the earth fades away, and we look after the twinkling star as we have often looked after a railroad train that has dashed by and become in a moment a speck in the distance.

The rate of the earth's motion is marvelous. Scarcely any comparison can convey an adequate idea to our minds. The flash of a sword-blade through the air is not so quick as the movement the earth has kept up from the hour of her birth.

Sixty-six thousand miles in an hour, eleven hundred in a minute, twenty in a second, is the rate the astronomer tells us of, but what distinct idea does it convey? It is about the same as the puzzling rapidity of electricity or of light.

The annual revolution of the earth around the sun is the first of the eight motions, and the most important, for by it the world continues to be what it was undoubtedly intended to be, the habitation of man.

The second is that which the earth makes on her own axis, as the next most important to her in her individual capacity, though to institute distinctions between these various movements is not absolutely, but only relatively, correct; for

should any one of the eight be disturbed or suspended, who can say what trouble might not ensue?

The diurnal motion we all rejoice in, as day and night succeed each other. The laborer is glad when the toilsome work of the hot day is over; and the young maid, full of life and spirits, feels her heart beginning to flutter within her, as the darkening shades of evening hasten on the hour for music and dancing.

This daily rotation causes the surface of the earth to move at a speed of twenty-five thousand miles at the equator in twenty-four hours, sixteen thousand in the latitude of London, while at the poles there is, of course, none at all.

A third movement of the earth is called the precession of the equinoxes. The equinoxes are the points where the ecliptic, or the real orbit of the earth about the sun, or the apparent path of the sun in the heavens, crosses the celestial equator, which is the real equator of the earth extended into space. The earth reaches her position on the ecliptic a trifle earlier each year (about twenty minutes of our solar time), and this change is called the precession of the equinoxes.

Through this movement the terrestrial axis accomplishes a slow rotation, to end only in twenty-five thousand eight hundred and sixty-eight years, and by which all the stars of the heavens seem to change their position, when, in reality, the earth is changing hers.

There is a fourth movement, about as grand, but more intricate and difficult of explanation, by which a gradual change is made in the position of the perihelion, or that part of the earth's orbit nearest the sun, and which has an influence upon the seasons. This motion requires twenty thousand nine hundred and eighty years for its completion.

A fifth movement is called a periodical change in the obliquity of the ecliptic. The orbit of the earth vibrates backward and forward, each oscillation requiring a period of ten thousand years; so that we have not yet swung out as far on one side as we can.

A sixth motion is called nutation, or nodding. It is as if the earth were balancing on a pair of well-legs. No other word is so appropriate to our purpose, for she seems to be standing now on one foot and now on the other, as we have all seen children amuse themselves. This is due to the attraction of the moon, although she is only one forty-ninth the size of the earth, and one eighty-first part as heavy. Luna, though so insignificant, influences her lord and master, as many a woman whom her husband looks down upon exercises sway over him which he little imagines, and which he would be slow to confess, though plainly discernible to the eyes of strangers. Thus the earth describes with the pole of the equator a small ellipse, upon the celestial sphere once in every eighteen years and eight months.

A seventh motion is that wherein the earth pays deference to her brothers and sisters in the solar system, departing from her orbit a short distance, as if to meet them as they approach her, acknowledging their presence, and then resuming her regular course.

Science says these are perturbations, calculable beforehand in the curve our planet describes about the sun, now swelling it, now flattening it, as gigantic Jupiter approaches or as Venus comes more near, and with the other planets also, according to the variations of their distances.

These five movements last mentioned are intimately connected; some, indeed, are separable only in theory, and all combine to produce a wabbling or waving motion from side to side of the orbit.

And then comes the eighth and last motion of the earth—last of all, and greatest of all—wherein