



IN THE MARKET.

A Good Place in Which to Study Feminine Character.

If any young man should ever be dispassionate enough to wish to test his betrothed's characteristics, housewifely and otherwise, let him observe her, unobserved, when she goes to market. There are a great many type of marketers, and most of them are far from being admirable.

There is the elegant lady (in her own estimation), who dresses for market as regally as she would for an evening function, almost. She is attired in rich silk, and carries her train negligently in one hand, allowing part of it to sweep over the far from immaculate floor. She is decorated with wonderful Persian embroideries and handsome lace; her hat is nothing less than marvelous, a good chatelaine swings from her waist, and her diamonds and opals shame the sun. She saunters carelessly past the stalls, disdainfully asking the price of anything, and paying at a high rate for all her purchases. Therefore she commands abject respect; but the glances which follow her are more curious than approving. She offends against the eternal fitness of things.

There is the otherwise sensible woman who falls a victim to vanity in the wearing of her one diamond ring. She always considers a good deal about her purchases, and in the process of consideration—as everyone knows—it is such a help to lean the cheek against the right hand, and to pass it across one's eyebrows. The friendliest observer must admit weak vanity in this type.

Then there is the strong-minded woman—she who wears common-sense shoes and otherwise defies the aesthetic. She holds that "dressing up" for market is all nonsense, and goes to the other extreme of making herself a fright. She also brings forth a set of manners considered by her appropriate to the occasion. Thus, she regards it as no impoliteness to doubt the assertions of stall-keepers as to the freshness of eggs and the tenderness of meat, dispensing with all formalities of "if you please" and "thank you." She ranks among the extremists, and is severely criticised by those from whom she buys.

Then there is the economical marketer, with her whole soul bent on saving, steeled with desperate resolve to possess herself of every half-cent which may hang in the balance. She wants to know the price of everything and then disputes about it, driving hard bargains. She finds fault with the measure given her, pointing out where one or two more potatoes or apples could be piled on a half-peck. She is detested by the stall-keepers.

Next, and perhaps most objectionable, is the woman who must handle everything she buys or doesn't buy. She turns over meat with hands that are rarely of the cleanest, strips corn, fingers tomatoes, and picks up slices of cheese. She is a horror.

Last, and most contemptible, is the marketer, who steals. She regards it as indispensable to taste everything, and does it by fair means or foul. She reaches out a forefinger and secures a fragment of butter, a shred of cheese; she abstracts, absently, as it were, small bunches of grapes, peaches, scraps of dried beef; she has even been known to bite into a pear, make a face at its tartness and replace it on the stand with absolute sang froid!

Language fails for her description. She is detestable.

Rare, indeed, is it to find the happy medium among marketers; she who dresses modestly and sensibly, comporting herself with consideration for others, polite, discriminating in her purchases, but not miserly. When she is found, you may rely upon her all-around worth. Character is revealed in marketing.—Philadelphia Record.

The Mercerizing Process.

Mercerizing is a chemical process of rendering cotton threads lustrous. The thread is shortened and hardened, producing a silky effect. It is named after the inventor, John Mercer.



Stripes rather than figures rule on the new colored shirts.

White linen blouses, embroidered with black are a pretty feature in mourning dress.

Wide band edges of the lace are most effective, and in the linen it has almost the effect of silk.

A pretty brooch to wear with sum-

mer gowns is of white enamel in floral design with a small diamond centre.

Mercerized denim is one of the smart materials for shirt waists and entire costumes. It is said to wash well and also to retain its gloss.

In white dotted muslin is a negligee made up over yellow silk. The lower part of this gown is formed almost entirely of patterns of lace insertion.

One odd fancy in millinery is a black and white straw hat pleated like a checker board and trimmed with a large rosette of white tulle and black leaves or a bunch of small flowers at one side.

Linen collars, the plain round kind, are finished with a turnover of white embroidered edging of the same width and fitting the collar snugly. The softened effect thus obtained is becoming to a majority of faces.

The regulation sandal for children is being displaced by a low shoe made like the ankle tie, with the difference that the toe-piece is cut with small slits to allow a greater amount of fresh air to reach the little foot of the wearer.

Orange red is the color of the flowers in a striking muslin waist. This is made in pleats, with a yoke of big wheels of a cafe au lait lace. These also form the cuffs, and there is a little turnover collar made from them.

The new silk hosiery is gossamer in its fineness, and inset with lace to make it more so. Colored hose are displayed in great variety with shadowy visions of white stockings looming up here and there. White stockings embroidered with black are not uncommon at all, and some very decided rumors tell us that the vogue for white hose is coming again.

A Dollar by Mail.

"Possibly," said the man who knocks around among all kinds of people, "there are postal employees who are not trustworthy, but they are few and far between. An instance came under my notice recently showing that I am right. I was talking to a friend about the last case of untrustworthiness that the papers had been talking about, when he took from his pocket an odd-looking trinket and handed it to me. It was a small circular thing, with a postage stamp on one side, and the other was completely covered with a round piece of white paper on which his name and address were written in small letters. The stamp bore the Government cancel. A brief investigation showed me that it was a silver dollar, stamped on one side and addressed on the other, and it had come through from one of the extreme southern Florida postoffices to the New York Postoffice and had been safely delivered to him. Of course, every employe through whose hands it had passed knew what it was, and it would have been an easy matter for some one of them to have slipped it into his pocket; but no one had been weak enough to 'pinch' it and it had made its long journey in safety."—New York Sun.

Warm Welcome For Wrong Man.

Here is a story which the late Congressman Amos J. Cummings was fond of telling: A member of Congress was going home late one night when he met a young man who was satisfactorily "loaded." The Congressman happened to know where the young man lived, and kindly guided him home. The Congressman had no sooner pulled the bell than the door was thrown wide open and a tall, husky woman appeared. She never said a word, but grabbed the young man by the collar and shook him till she fairly loosened his teeth; then into the hall she took him and slammed the door.

The Congressman was descending the steps when the door was thrown open a second time, and his friend flew out of it as if thrown by a catapult. At the foot of the stairs he landed, and the Congressman picked him up. Very much frightened and considerably sobered, the young man gasped: "We don't live here—we moved last week."—New York Tribune.

How the Captain Knew.

On the Chattahoochee River, in Georgia, in the olden days a steamer used to run down the river into the Appalachicola and thence to the Gulf, meeting, of course, any number of alligators en route. One day some ladies were standing by the pilothouse on the upper deck watching the big reptiles. "Captain," asked one of the ladies, "is the alligator amphibious?"

The captain scratched his head for a moment in thoughtfulness. "Yes'm, yes'm," he finally replied, "I think he is. 'He'll eat a boy in a minute.'"—The Evening Wisconsin.

Sacred Fires of Balkans.

In the homes of Balkan peasants nothing is prized so highly as the fire on the hearth, for it is regarded as sacred, and is never allowed to go out. Tradition says that if it is extinguished misfortune will surely come, and that in many cases the death of the fire is a sure token that some member of the family will speedily die. Another time-honored tradition says that the sacred fire is able to cure many maladies, and this is supposed to be the main reason it is guarded so carefully throughout the Carpathians and the Balkan peninsula.—London Mail.

SCIENCE AND INDUSTRY.

Tungsten, worth eighty cents a pound, is largely used in metallurgy, and gives to steel qualities similar to those imparted by molybdenum.

During the year 1901, thirty-six asteroids were discovered, all but one of them at Heidelberg, by means of photography. The asteroid group is now known to have 475 members. No. 475 is especially interesting from its great southern declination when discovered—61½ degrees, for the large eccentricity of its orbit and for the smallness of its perihelion distance—1.6 times that of the earth. It was discovered at the Harvard college station, at Arequipa, Peru.

Both Darwin and Sir John Lubbock have expressed the belief that ants are in the habit of planting the seeds of a grass known as ant-rice, for the purpose of providing themselves with a crop of the sedes for food. The fact that the grass is often found growing abundantly near their nests lends plausibility to the theory, but Professor Wheeler says that all this is accidental. The ants store the seeds, or rice, in their nests as food, and when a grain begins to sprout they carry it out of the nest. To say that they really sow the seeds, he claims, is as absurd as to say that a cook is planting and maintaining an orchard when she throws into the yard the stones of the peaches she is using, and they happen to grow into trees.

The theory of sound is that it is caused by vibrations in the air, and that when it passes through a solid object, like a wall, these vibrations are imparted to the particles that compose the object. It has long been believed that lead is one of the poorest conductors of sound, poorer, for example, than glass; but experiments lately made show that sound passes more readily through a lead wall than a glass one. These experiments were reported at a meeting of the American Physical society, the conclusion drawn being that the medium that yields most to steady pressure is the best conductor. This is at variance with the views generally held on this subject, and will give rise, no doubt, to much discussion and to further experiments.

The recent announcement in several quarters that a new remedy for cancer had been discovered in plasters made from the common violet flower and its leaves gives some interest to the true therapeutic action of the latter. It is by no means new in medicine, having been employed as a domestic remedy in ancient Rome. The whole plant of viola odorata (the sweet violet) contains an acrid poisonous principle named by its discoverer, Boullay, in 1828, "violine." This poison is a white or pale yellow acrid powder, somewhat soluble in water and alcohol, and having powerful emetic properties. Small doses of the root act as a tonic; larger ones as a purgative, and in doses of from 40 to 60 grains it is an emetic. The odoriferous principle of the flowers has not yet been definitely established.

Professor Forbes of Edinburgh has for many years worked on the problem of determining the position of a planet more distant than Neptune. The point of departure of his method is the theorem announced by Professor Newton of Yale in 1879, viz.: If the parabolic orbits of comets have been changed to ellipse the changes can only be due to the influence of planets, and the aphelion of the new orbit is, in all probability, the position that the comet occupied at the time of the change. In 1880 Professor Forbes showed that seven comets have an aphelion distance of about one hundred times the earth's distance from the sun. He has recently found a new comet of this class. The comet of 1856 is identified by him with a comet rediscovered in 1844. Its orbits had been disturbed by a planet with a mass considerably greater than that of Jupiter at a distance of about one hundred times the earth's distance, and calculation shows that the longitude of this planet would be at present about 181 degrees. The method followed by Professor Forbes is necessarily difficult and slow. It is likely that the extra-Neptunian planet, if indeed it exists, will be discovered by the comparison of photographic plates of the sky. Several astronomers are now at work on the problem.

An Automobile House.

The largest automobile in the world is being constructed for a Parisian doctor. In it, accompanied by two medical students, he intends to make a trip around the world. It will have two sleeping apartments, a large workroom and four big tanks for storing oil.—Chicago Journal.

Thankful.

"You say you are thankful you have a cold!" "Yes," answered the optimist. "A cold is one of the few ailments that a doctor will undertake to cure now-a-days without surgical operation."—Washington Star.

Causes of Volcanic Eruptions

By Albert Perry Brigham, Professor of Geology.



NO CONCLUSIVE word has been spoken on this subject. A final conclusion may lie beyond the bounds of human investigation. As with the glaciers of the Ice Age, earthquakes, or the origin of species, many facts are known, and some major conclusions cannot be doubted, but the ultimate cause yet lies in obscurity. This is not discouraging to the true student, but only one of many proofs of the limitation of our knowledge.

Two questions must be asked: (1) What are the sources of the heat needed to melt the rocks and form the gaseous clouds of vast extent? (2) What is the force that expels these materials from the crust? As regards the first, many answers have been given which must be set aside, or at least appear to be inadequate. Volcanic heat has been thought to be a remnant of the original heat of the globe. But on this theory it would seem that vulcanism should gradually have declined through the ages of geological history. This has not been proved, and some facts look in the opposite direction. Others have thought that the heat comes from powerful chemical reactions in the deep natural laboratories of the earth's crust. But this cause seems insufficient for the melting that is accomplished. It is known that rocks melt and become plastic, under great pressure, in the presence of water and alkaline materials. This is called aqueo-igneous fusion, but does not account for the great heat of volcanoes. All these causes may contribute to the result in various degrees and localities. Thus the original heat of the earth is believed to hold the rocks of the crust near the melting point at no great distance below the surface. Such crushing as goes with mountain making may add heat enough of mechanical origin to cause fusion. A seemingly paradoxical theory is that the under rocks would melt if they were not under stupendous pressure, and when at some points this pressure is relieved in the succession of strains which the crust undergoes the rocks there pass into a molten state. The two theories are not inconsistent. At one point we have added pressure and added heat; at another removal of pressure and lowering of the melting point.

As to the cause of explosion, the answer is hardly more satisfactory. The sudden conversion of water into steam is thought to have much to do with explosive eruptions, and the more as most volcanoes are near the sea. But this does not account for inland or quiet eruptions. Nor is it easy to see how enough water could reach the seat of the heat, either by saturation or sudden inflow. Chains of volcanoes, as in the Andes, correspond with lines of mountain making. A perfect theory must explain all the facts. Why are some eruptions quiet and other violent? Why the differences in the composition and heat of lavas? Why should there be a difference of 10,000 feet in the height of the lava columns of the adjacent volcanoes of Mauna Loa and Kilauea? Why are some vents intermittent and others constant in action? Such are some of the questions. No theory covers all of these.

The Mortgage on the Farm

By Edwin Farrer.

THE mortgage on the farm" is a subject upon which numerous writers have exerted their energies in the production of poems, editorials, special articles, humorous squibs and pathetic stories without number, tending to impress the minds of the readers with sentiments of horror of this (as they represent it) peace destroying, poverty breeding curse, and we are led to regard the farmer who has affixed his signature to a mortgage as an object of pity, who is doomed to spend his days in slavish toil and his nights in sleepless misery. Thus has been created a hideous bugaboo which has frightened, to their serious injury, many people who have been brought to regard the mortgage as the symbol of certain financial ruin, and who have thus been deterred from making any attempt to secure homes and farms of their own.

In the meantime hundreds of millions of dollars are loaned, in small sums, on mortgage security, to industrious, thrifty men, who are thus enabled to become owners of the soil upon which they live. Many of them, if questioned as to their method of accumulation, would, in reply, make a statement similar to the following:

"Having determined to become the owner of a farm, with the assistance of some friends I bought a small piece of land, mortgaging it for nearly all it was worth, and went to work with all the energy I possessed to pay off the debt. When I had succeeded in clearing it of all incumbrance I bought another piece, giving another mortgage, and working to pay it off, and have continued ever since to buy property, give mortgages and work to pay the debts. As soon as one piece was paid for I would buy another, and thus I have always had a mortgage to pay off, which has given me an object to work for and kept me hustling."

The mortgage is really one of the conveniences of our modern civilization, by which we are enabled to secure and use and enjoy the accumulated wealth of others, and, instead of being an unmitigated curse to the farmers of the land, it has been the lever by which many thousands of worthy men have been lifted from the condition of "hired hand" or that of "renter" to that of freeholder, and has thus proved a blessing rather than a curse.

Argument Against Suffrage

By Heloise Edwina Hersey.

WE come to the practical question of what would be the effect upon the country if women were now permitted to vote. The United States is to-day in grave peril from too wide an extension of the franchise. The corruption of our great cities is chiefly the result of a mass of ignorant voters. The wild heresies, financial and social, which sweep over our country every few years, find their force and danger among the ignorant. You must remember that the question is not whether you and I are better fitted to vote than the man that loafs on the benches of Boston Common, or that shovels sand on a Western railway, or breaks stone in the South. The question is whether he is better fitted to vote than his wife and his daughter, or whether we shall remedy the evil of his vote by adding to it that of his wife and daughter.

The truth is that in what, for want of a better phrase, we must call the lower ranks of society, the average political intelligence of women is far below that of men. It is easy to say that this is due to the fact that women have not been brought to acquire knowledge of politics, since they have had no voice in them. I doubt if this is true. The difference seems to me to be a fundamental intellectual one—a method of thought rather than a lack of thought. Ever granting that it is not so, however, it is obvious that it would take at least two generations to cure the evil. To instruct a whole sex in political duties would be a gigantic task.

The World's Mightiest Force.

By the Rev. Howard Duffield.

THE newspaper is the colossal force of the modern world. Mechanically the newspaper lays all other departments of invention and discovery under tribute, subsidizing the railway, the steamship and the electric wire.

Intellectually the newspaper sweeps the horizon of events and scans the encyclopedia of ideas. The tinsel of fashion, the shadow of death, the pomp of courts, the filth of slums, the grandeur of heroic achievement, the miasma of scandal, the austerity of the law, the brutality of vice, the triumph of science, the pulse of the money market, the glow of eloquence, the chimes of poetry, the vulgar impertinence of gossip, overlap in its columns.

Personally, the newspaper colors the thought and molds the character of uncounted multitudes. It interviews personally, and every day, all who dwell within the boundaries of civilization, from capitalist to gamin, outlining conversation, enlarging vocabulary, creating prejudice, kindly sympathies, at times ennobling, at times poisoning nobility, at all times enveloping the reader with the atmosphere through which he sees his world.

Ethically the newspaper is creedless, not immoral, but unmoral. It is a business enterprise pure and simple, sweeping the planet for information that is marketable and advocating those principles which are backed by a constituency able to express itself in dollars and cents.

Ideally the newspaper should be the lever for the uplifting of the world. It should dedicate its vast power to the dissemination of all that makes men patriotic, honest, kindly, devout. Its peculiar access to the public heart should issue in the invigorating, the purifying and the spiritualizing of the public life.