



NO SCHOOL UP TO TEN.

During the course of many years of investigation into the plant life of the world, creating new forms, modifying old ones, adapting others to new conditions, Luther Burbank has been constantly impressed with the similarity between the organization and development of plant life and of human life. In "The Training of the Human Plant" (The Century Company, New York) he tells how the principles he has applied to the culture of plants might be applied to that of the human species, and points the way to a grander race than the world has ever seen. The United States he considers the most promising field for the application of such ideas, for "all that has been done for plants and flowers by crossing, nature has already accomplished for the American people." By the crossings of types, strength has in one instance been secured; in another, intellectuality; in still another, moral force. All that is left to be done falls to selective environment.

By environment, according to the plant wizard, everything can be done with a child. It is immeasurably more sensitive and responsive than a plant. Heredity, it is true, counts for much, but heredity is merely the "sum of past environments." Stored within it are "all the mysteries of the universe," and the appropriate environment will bring out whatever is desirable in that heritage. If it were possible to isolate a dozen families under ideal conditions, Mr. Burbank says, more could be accomplished for the advancement of the race than could now be accomplished in one hundred thousand years.

By an ideal environment up to the age of ten years, by which time the child's character is fixed, Mr. Burbank means a country life, with sunshine, love and beauty, well balanced, nutritious food; music, pictures, good times, the closest communion with nature and no school. "The curse of modern child life in America is over-education," he declares. "The injury wrought to the race by keeping too young children in school is beyond the power of any one to estimate. We take them in this precious early age, when they ought to be living a life of preparation near to the heart of nature, and we stuff them and overwork them until their poor little brains are crowded up to and beyond the danger line. The work of breaking down the nervous systems of the children of the United States is now well under way."

"Every child," Mr. Burbank thinks, "should have mud pies, grasshoppers and tadpoles, wild strawberries, acorns and pine cones, trees to climb and brooks to wade in; sand, snakes, huckleberries and cornets, and any child who has been deprived of these has been deprived of the best part of his education."—New York Tribune.

CATS ARE SHREWD.

"No cat," says Barry Palm, "ever cared one fraction of a pint of milk about a human being, and no feline cat owner believes it." We fear that this is a true bill.

A cat may purr and purr and be a villain. Once let the cuisine fall below the proper mark, and off goes the ungrateful (but shrewd) animal to stop with friends who will look after him better. That is the keynote of the feline character—shrewdness. It is the human quality in their character which make men call cats selfish. The motto of the feline is "Business is Business." If a man takes this as his motto and acts up to it we call him a successful man, and we allow him to write absurd essays on "Hints to Young Lads," and so on, in the press. But we do not honor the cat. We try and shame him by pointing out to him how much fonder we are of the dog. Does the cat blanch? Not he. "Which has the better time?" he asks us quietly, and slips out through a window for a stroll, while the dog remains shut up indoors, depressed because his master will not take him out that afternoon.—New York Globe.

TURNING TO BUTTERMILK DRINKING.

Food is bound to be a topic for discussion when New York women get together, it is said. They talk of the favorite dishes and drinks of each; of the merits and demerits of various restaurants, and so on. They boast of their knowledge of the art of cooking and of their joy in eating. So it must be a dreadful blow to Manhattan housekeepers to hear they must feed their families on buttermilk if they wish to be fashionable. The Rooseveltians have taken up the idea. In the White House, frapped buttermilk with tiny cubes of pineapple, bits of orange and berries is served. Out at Friendship, the summer home of John R. McLean, the President, on a ride, stops at the farm house for a glass of buttermilk. Frozen buttermilk, long appreciated by the epicures of New Orleans, has been introduced in the North. It is sweetened only slightly and the tart flavor is not lost.—New York Press.

WOMEN AT WORK.

Miss Alice Perry has recently been appointed County Surveyor of Gallegos, the first and only woman in Ireland who has qualified as a civil engineer. In this particular instance American women have gone their Irish sisters one better. The first woman civil engineer in this country came from a progressive Western State, although she took her degree in an Eastern college. For several years she has been connected with one of the largest firms of architects in New York and it is claimed that she is responsible for the ground plans of more than one skyscraper. The second girl in this country to choose civil engineering as a profession was Miss Nora Blatch, a granddaughter of Elizabeth Cady Stanton. Miss Blatch is a Kappa Kappa Gamma from Cornell, is a full-fledged civil engineer, and is now in the employ of the American Bridge Company. Her mother, with whom she lives in New York, is the president of the Equality League for Self-Supporting Women.—New York Sun.

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HARMONIOUS ACCESSORIES.

Every woman knows the value of having accessories and surroundings which harmonize with the gown she is wearing, but few have gone so far to obtain them as some Parisian women are doing. These women, aware of the importance of a suitable frame for a beautiful picture, and having the money to gratify their desires, have numerous reception rooms in their homes—as many as six sometimes—and each one arranged in a different color. So, whatever color the hostess is wearing, she is able to receive her guests in a background that "matches."

Women who cannot compass more than one reception room may take comfort in the reflection that there is one color which never quarrels with any reasonable delicate tint. What color that is may be learned by noting the part played in a well arranged nosegay or flowers by dull green.—New York Tribune.

ST. LOUIS HAS A GIRL BLACK-SMITH.

Miss Minnie Hagmann, sixteen years old, daughter of Lorenz Hagmann, a blacksmith, is a blacksmith herself.

This young girl has been in her father's shop for three years, and, as he expresses it, "knows all about everything." She can shoe a horse as quickly and as neatly as the best of them. She can make a wagon, too.

In fact, there is nothing about the shop that she does not understand; no kind of work that she is unable to perform. Her father knows no man he could employ who could do half the work his daughter does, he says.—St. Louis Dispatch to the Baltimore American.

TAFT DEFENDS THE BACHELOR GIRL.

Secretary of War Taft, before the students of the University of Cincinnati, today strongly defended the bachelor girl. He said:

"Any woman that marries because she thinks she has to makes a great mistake. She must not think that to benefit mankind she must necessarily have to become a wife and mother. Matches are said to be made in heaven, but I believe heaven only arranged the proximity and we mortals do the rest. Proximity, you know, is the great thing, and universities are great on proximity."—Cincinnati Dispatch to the Baltimore American.

FASHION NOTES.

Some new straw hats seen this season have been as fine as woven silk.

In hat trimmings, ribbon is playing an important role.

Turquoise blue is a stunning shade with which to surround the crown of your Panama outing hat.

Alice-blue has not been a fad of a moment. It is still very fashionable and cuffs and collar of it are seen on many suits of dainty checked materials.

Hardly a veil without a fancy edge or border of some kind is seen on a hat with any pretensions to smartness.

Leather continues to be used in novel ways. The latest thing is the leather hatpin. The head of the pin is cone shaped, embossed and stained in a unique design.

There is an undoubted tendency toward draperies, exhibited for the most part in the fichu effects on the waist, and in some overskirts of thin fabrics, with the overskirt showing at the sides.

A wide gold ribbon belt and little bows of gold ribbon on the jacket are new touches.

The bright colored Persians are chosen for trimming because they show through so effectively.

White pin roses covering the top of a round, wide-brimmed hat run over the side down to the hair where they are lost in the soft folds of a huge ribbon bow.

There is a good deal of Persian trimming applied to revers, vest, etc., of street suits and overlaid with heavy, coarse-mesh lace.

By sleeves are coming, beyond a doubt. They are here in fact, but the vogue of many materials in combination simplifies the style for home dressmakers with last year's gowns to remodel.

How Much Depends On Good Medicines

By Robert Kennedy Duncan.

SO, because any man, however ignorant, with any motive, however ignoble, may manufacture and sell any of the 50,000 compounds known to organic chemistry and may allege for them what curative powers he will, and because, too, of this unlimited opportunity for fraud among the older drugs, it becomes a matter of no surprise to learn that at the present time among the great number of firms manufacturing remedial agencies there is the greatest conceivable diversity in science, sincerity, and wisdom.

These drugs come from the uttermost parts of the earth—from the darkest forests of Brazil, from the frozen Siberian steppes, from the banks of the "silken Samarkand," but almost everywhere they are gathered by barbarous peoples, the lowest of earth's denizens. It is small wonder, then, that with any one plant there should be a variation among its individual specimens in the proportion of the active medicinal agent it contains. But when we add to this the fact that, in general terms, the per cent. of the active ingredient depends on the amount of sunshine it enjoys, on the time of the year it is gathered, even on the time of the day, on the amount of moisture, the elevation, the character of the soil, and a dozen other factors, it becomes almost a necessity of thought that the amount of "medicine" in that plant must vary from a maximum to nothing at all.

A man's wife goes bravely down to the gates of Death to pass through, or, if it may hap, to come slowly back, bearing radiantly with her the flaming torch of another life. Ergot is required. Now, ergot is the fungus growing upon Rhus, Austria, Spain, Sweden, and where not; its chemical analysis from Russia, Austria, Spain, Sweden, and where not; its chemical analysis does not seem to yield reliable information, for its active constituents are not definitely understood. Finally, the physiological activity of the drug may be good, or little, or zero, just at it may chance, while after the lapse of a year it becomes unfit for use. Yet it is in this substance, so utterly variable, that the physician must trust the life of the woman and the child.—Harper's.

Tracing the Horseshoe Superstition

By A. F. Hamilton Frisbie.

THE belief in the talismanic luck of the horseshoe is originally an Arab superstition, and dates from the time of the Second Crusade. To this day one may see horseshoes displayed over the doors of some Arab houses—points down, of course—especially in the houses of the El Kazin tribe (sometimes wrongly referred to as the Dalalics).

Merhada El-Kazin, the first chief of the tribe, was originally an Arab metal worker and shoer of horses, during the Second Crusade. He was one of a band of Arabs which was being "scare beset" by the Crusaders, under the leadership of a Norman, one Sir Geoffrey Fite. The Arabs were in such a plight that they agreed together that the one of them who should devise and execute a plan to overthrow the band plighted against them should be made chief of their tribe, and that his descendants should be chiefs forever, the tribe taking his name.

Merhada El-Kazin was making a horseshoe when he heard this decision. Taking the shoe hot from the fire, he went to the battlements, and pistol in hand and the two points entered the eyes of the commander, destroying his sight. The crippling of the leader put the Crusaders to rout, and Merhada El-Kazin became chief of the tribe which bears his name to this day.

I have this legend from a member of the tribe, and I have personally seen a descendant of El-Kazin, who was chief of the tribe when I crossed the Sahara in 1889. There is a horseshoe over every window and door of his home, and even to the door of his tent when he is travelling, as when I saw him.

The Eulogy of Grass.

By John James Ingalls.

GRASS is the forgiveness of nature—her constant benediction. Fields trampled with battle, saturated with blood, torn with the ruts of cannon, grow green again with grass, and carnage is forgotten. Streets abandoned by traffic become grass-grown like rural lanes, and are obliterated. Forests decay; harvests perish, flowers vanish, but grass is immortal. Beset by the seven hosts of winter, it withdraws into the impregnable fortress of its subterranean vitality and emerges upon the first solicitation of spring. Sown by the winds, by the wandering birds, propagated by the subtle horticulture of the elements which are its ministers and servants, it softens the rude outline of the world, its tenacious fibres hold the earth in its place and prevent its soluble components from washing into the wasting sea. It invades the solitude of deserts, climbs the inaccessible slopes, and forbidding pinnacles of mountains, modifies climates and determines the history, character and destiny of nations. Unobtrusive and patient, it has immortal vigor and aggression. Banished from the thoroughfare and the field, it hides its time to return, and when its vigilance is relaxed, or the dynasty has perished, it silently resumes the throne from which it has been expelled, but which it never abdicates. It bears no blazonry of bloom to charm the senses with fragrance or splendor, but its homely hue is more enchanting than the lily or the rose. It yields no fruit in earth or air, and yet, should its harvest fall for a single year, famine would depopulate the world.

Overwork on Farms.

By Woods Hutchinson, M. D.

ANYONE who has lived on a farm knows of the strain under which the American farmer lives during the five months of spring and summer. His workday is from 4 or 5 o'clock in the morning until 8 or 9 o'clock at night, including chores—fifteen to seventeen hours of the hardest kind of physical labor, and every minute of it at high tension, especially during harvest.

Then comes a period of relaxation in the fall, the one time in the year when he has just enough muscular exercise to keep him in health; later, the winter season, approaching stagnation, in which he takes no field work, and then a furious debauch of hard labor through the spring and summer again.

No wonder that by forty-five he has had a sunstroke and "can't stand the heat," or has a "weak back," or his "heart gives out," or a "chill makes him rheumatic"; and when you add to this furious muscular strain the fact that the farmer sees his income put in peril every season, and his very home every bad year, so that each unfavorable change in the weather sets his nerves on edge, it can be readily imagined that the real "quiet, peaceful country life" is something sadly different from the ideal.—Harper's Magazine.

Success that Does Not Satisfy

By a Wealthy New Yorker.

MANY years ago I came here from a country town, poor as any boy could well be; found employment in a large concern, bettered my position year after year; became a partner, then the head of the concern. Made a fortune, a large one; now retired.

When I die I shall leave my children each a fortune, but when I think it over day after day I can only be ashamed of it all. I suppose I was no worse than the others. I know some were worse than I. I could always say, "It's good business," but I forgot that there was such a thing as a square deal. If I could get the better of an associate or a customer or an employe, I did. Anything that I could do to attain my success was good business, and I did it.

I have given to charity, headed subscriptions, but it doesn't satisfy me. I know what I have done wasn't manly. Last night I saw with other so-called successful men. I studied them. When they can't help thinking they think just as I do.

The modern success is rank failure. It has made this country rich; it has made it great; it has made its people selfish and unprincipled. It has given all I possess tonight if I could say: "I have given every one a square deal. I have done no man a wrong."

Think it over; it will mean a lot to you some day.

On Longfellow's Critics.
He is already thought negligible by some clever young men of over-educated mind and under-educated heart, who borrow their ethics from the cave-men, their philosophy from the raft-men, and who, in the presence of the same material from which Longfellow wrought delightful poetry—the same landscape, the same rich past and ardent present and all the "long thoughts" of youth—are themselves impotent to produce a single line.—Miss Perry in the Atlantic.

FARM AND GARDEN



GREEN FEEDS AND MANGOLDS.

Succulent foods are supplied to all birds each day throughout the year. The double yards allow the birds to gather green grass, young oats, rye or rape for themselves during the growing season, as they are turned from the worn run to the fresh ones, when the supply of green plants is eaten off. If the sod is much broken, or the plants injured so they will not spring up and cover the surface with green again, the vacated yards are cultivated and reseeded heavily.

When buildings are new and the runs are fenced in from land with a good sod on it, the yards may last a year or two without the sod being used up, but unless they are large it will soon be necessary to cultivate and reseed, if they are depended upon to furnish green food. The yards, 20 by 100 feet, are large enough so that there is room for a single horse to work comfortably in them. It is questionable whether it might not be more economical to construct only single yards for exercise, and feed the hens daily on green food, which could be raised on rich land, handy by. Probably less labor would be required to raise the green food in the fields than in the yards, but the labor of cutting and carrying it to the birds would be considerable.

For green food during winter and spring mangolds are used. They are liked by the birds and when properly harvested and cared for remain crisp and sound until late spring. They are fed whole, by sticking them on to projecting nails, about a foot and a half above the floor. Care must be exercised in feeding them, as they are laxative when used too freely. On the average about a peck per day to 100 hens can be safely used. They would eat a much greater quantity if they could get it.

A four months' feeding contest, extending from Jan. 1 to April 30, 1906, in which mangold wurzels were compared with cut clover, has just been completed. Two lots of hens, each consisting of 100, were kept under similar conditions, except that one lot had about 17 pounds of mangolds each day and no cut clover, while the other lot received no mangolds, but were given five pounds of clover leaves and heads, gathered from the feeding floor in the cattle barns. Both lots of birds had new beds of oat straw every week. The 100 birds eating the mangolds averaged laying 62.9 eggs each, during the four months. The 100 birds eating the clover average 59 eggs during the same time. The slight difference between the yields of the two lots can hardly be regarded as indicating greater value for the mangold ration.

The vigor and apparent healthfulness of the two lots were equally good. In the general feeding both mangolds and clover are used daily. Formerly it was thought necessary to steam or wet the clover with hot water in order to get good results from it. It is now cut and fed dry, in the bottom of cement barrels, cut off about 10 inches high. About five pounds are eaten daily by 100 hens, with very little waste. Apparently as good results are gotten from it as when it was scalded the labor of preparation being very much lessened.—G. M. Gowell, Maine Experiment Station, Orono, Me.

MADE HOGS PAY.

A hog grower says he had twenty-five pigs, and kept careful account of what they cost him at the time he sold them. He says he began to fit them for market June 1st, and from that date to July 1st a half bushel of ground oats were consumed daily; from July 1 to September 10, one and one-half bushels, and from the latter date to November 20, when sold, four one-half bushels of ear corn were fed daily. This made 120 bushels of oats and 215 bushels of corn, the entire amount of grain fed. Oats were selling for 30c and corn for 25c per bushel, the cost of grain consumed was approximately \$115. Adding to this \$6 for pasturage and \$25 as the cost of the lot up to the time feeding was begun, we should have approximately \$146 as the entire cost of production.

The average weight when sold was 240 pounds, selling price \$4.10 per cwt.—making, about \$9.85 apiece, or \$240 for the entire lot. This leaves a net profit of about \$100, or the income on the investment was over 60 per cent.—Indiana Farmer.

PLANT A PUMPKIN PATCH.

If all the pumpkin seeds in the world were in the hands of a single reedsman and he would use printers' ink freely, making no extravagant claims, but giving the actual facts, he could sell it at fabulous prices. The seed, however, is found on almost every farm. It will pay every farmer to plant pumpkins. They will furnish him an excellent hog feed and cow feed in the fall. They can be raised very cheaply and fed easily.

We doubt, however, whether the common method of growing them in the corn field is the best one. The pumpkin is too great a lover of sunshine to do its best in the shade of a heavy crop of corn. If planted at the same time with the corn, or even a week later, it interferes more or

less with cultivation. Everything except corn planted in the corn field is a weed and we have enough weeds without planting pumpkins. On almost every farm there is some feed lot or corral or some other small tract of very rich ground which can be broken up and planted any time before the first of June in pumpkins, and an acre of this kind of land will produce more pumpkins than ten acres planted in the corn field.

Plant four or five seeds in the hill and eight feet apart in the row, the rows being eight feet apart. Keep down the weeds until the pumpkins begin to vine. If time were taken to cut the ends of the vines after sufficient pumpkins are well set to make a crop and thus prevent the strength of the vine going to more pumpkins which would be killed by frost, it would very much improve the quality and the yield. Try it if you have an acre of this kind of land, very rich, somewhere handy, and you will be surprised at the productive capacity of that acre.—Wallace's Farmer.

CURING FORGING IN COLTS.

Forging, especially in colts, is a most difficult trouble to overcome, says the Horse Breeder, and can only be obviated by careful experimenting. Have his feet made perfectly level. Let the toes on the forward feet grow out a little. Fit them to a pair of quarter boots and on each side have a pocket made, in which place some sheet lead. Keep adding to it until you have balanced the colt. This will, of course, increase his stride and knee action. The hind feet must be kept reasonably short. The object of weighting in the forward feet by quarter boots instead of adding to the weight of the shoes, is to save his legs. After the colt has acquired his proper gait, the cause being removed, the effect will cease and you can let him wear the quarter boots until the habit has ceased.

SHOULD RAISE SUNFLOWERS.

Every poultryman should raise sunflowers. They serve a double purpose, furnishing shade for the fowls and growing chicks during the hot days of summer, and later the seeds make a splendid feed for the fowls and chicks if fed judiciously. The oil in the seeds gives the plumage a gloss that can be obtained in no other way. Sunflowers will do well in almost any soil and can be planted in out of the way places, along the fences, in corners and so on. Get the Mammoth Russian variety. Both horses and cows are very fond of the leaves and tender parts of the stalks. There is no crop that pays the poultryman better.—Farmer's Home Journal.

SHELTER FOR STOCK.

Dry cold does not injure farm stock as much as a rain does, and animals that have the shelter of open sheds or straw, stacks withstand dry zero weather very well.

The worst place in the world for breeding ewes is the stock field, and we have seldom, if ever, seen a strong, healthy lot of lambs from ewes that have been allowed stalk field range. The same is true of brood mares due to foal in the spring. A few bushels of oats, or a few bags of bran fed the mares for a few months will insure strong, healthy foals that will grow lustily from the start.—Richmond Times Dispatch.

BOWEL COMPLAINT IN CHICKS.

Here is a remedy for bowel complaint in young chicks that has not been known to fail if used in the very beginning of the trouble, with clean, warm, dry shelter and good wholesome food. Boil fresh milk and after it is cool give to the chicks to drink; do not allow them any other drink until there are no more symptoms of trouble. Be sure that the milk is boiled, not just heated, as milk that is not boiled will prove laxative to the young birds.—Practical Farmer.

JUDGING WEIGHTS OF CATTLE.

A simple rule for the judging of the weight of cattle, says an exchange, is as follows: If the animal girls five feet, it will weigh somewhere from 700 to 750 pounds. Every added inch in girth adds 25 pounds till you get up to six feet, and then add 50 pounds to the inch.—Farmers Home Journal.

Cost of Flowers.

An approximation of the money spent each year in America for cultivated flowers is \$100,000,000. This is an amount equal to the value of all the realty property in the State of Oregon, to one-fifth the value of all coal mined last year, to one-fourth the surplus in the national banks, and almost equal to the net earnings of these banks. It is nearly twice enough to cover the bonded debt of all the New England States combined. New Yorkers spend more for flowers and elaborate floral designs than any other of America's lavish buyers, and their florists glean an annual harvest of \$4,000,000.—Philadelphia Press.

The air pressure produced by explosions often renders a miner unconscious so that the afteramp catches and kills even when the victim was neither burned nor near the initial explosion.