



MAGAZINE



GUARDIAN



SCHOOL AND HOME

FASHION NOTES.

Brilliantly colored tulle is often used for the huge butterfly bow at the back of the gown.

Green heels on black shoes are one of the latest notions with a black and green costume.

Head-work continues to be the chief trimming on Georgette crepe blouses and dresses.

In the spring fashions in shoes there predominate three colors: White, black and cocoa brown.

As the no-sleeve effect is not always becoming, the veiling sleeve of tulle continues to be liked.

The chances are that fashions will be eccentric during the next few years, simply as a reaction from the war.

A charming blouse of fine yellow linen has a row of crocheted buttons down the front and a string belt edged with black.

Some of the new one-piece tailored dresses have sleeves tight about the elbow and stashes linen chemisettes, Directoire style.

Folds and flounces are introduced as trimmings.

Tucks are used on coats to trim sleeves and collar.

'Tis surprising, but the chemist dress is still here.

Skirts are narrow to the necessity of employing slits.

The spring woollens are striped, squared or checked.

For country wear, rose and white are often combined.

Separate skirts are usually much shorter than dress skirts.

Crumb Cake.

Make a custard of two and one-half cups of sweet milk, two eggs, one-half teaspoon of salt, and two tablespoons of shortening. Add three cups of bread-crumbs. Sift together one-half cup of flour, and one-quarter teaspoon of soda. Add to the first mixture. Lastly add one-half cup of sour milk. Saute on an oiled griddle.

Meat and Breadcrumb Cakes.

To four parts of chopped or ground meat, add one part of soaked bread crumbs, a small quantity of chopped onion, salt and pepper to taste. Mix and form into small round cakes. Brown the cakes in butter or other fat. Raw ground meat may be used. If so, the pan should be covered so that greater heat will be applied.

Delicious Muffins.

Combine one cup of hot-cake batter with two cups of left-over cereal. Add one-third cup of bran, one-third teaspoon of salt, and one-half teaspoon of baking-powder. Bake in oiled muffin tins for fifteen minutes. If served with maple syrup, they are better than ever. This is a recipe to use up left-overs.

Coffee Spice Cake.

One-half cup butter, 2 eggs, 1/2 cup cold coffee, 2 teaspoonfuls baking powder, 1 cup sugar, 2 cups flour, 1 teaspoonful mixed spices, 1/4 teaspoonful salt. Cream the butter and sugar well together. Add the unbeaten eggs one at a time, and beat the batter well. Sift together the flour, baking-powder, salt and spices, and add them alternately with the cold coffee. Bake in a moderate oven until the cake shrinks from the side of the pan.

Snow Pudding.

Two and one-half cupfuls milk, 1-3 cupfuls cornstarch, 1-3 teaspoonful salt, whites of 2 eggs, 1/2 cupful powdered sugar, 1 teaspoonful vanilla. Mix the cornstarch mixture gradually, while stirring constantly, and let cook fifteen minutes. Beat whites of eggs until stiff, and then gradually, while heating constantly, add sugar and vanilla. Add to the cooked mixture, and beat vigorously one minute. Turn into a mold, first dipped in cold water; chill, remove from mold and serve with.

Chocolate Sauce.

Two oz. unsweetened chocolate, 1/2 cupful sugar, yolks of 2 eggs, 1/2 teaspoonful salt, 1/2 teaspoonful vanilla. Put chocolate, 1/2 cupful sugar and cold milk into double boiler, and cook until milk is scalded. Mix yolks of eggs with 1/4 cupful sugar and salt and heat eight minutes. Pour milk gradually, while heating constantly, into egg mixture; return to double boiler and stir constantly until mixture thickens. Strain, cool and flavor with vanilla. This sauce may be served in small glasses with whipped cream, sweetened and flavored.

Fig Pudding.

Take a quarter of a pound of sugar, half a pound of dried figs, one large sour apple, two eggs, a quarter of a pound of brown sugar, a quarter of a pound of stale bread-crumbs, a quarter of a cupful of milk, six tablespoonfuls of flour. Cream the sugar and add figs and apple, finely chopped, and sugar. Pour milk over the bread-crumbs and add yolks of eggs well beaten. Combine the mixtures, add flour and whites of eggs beaten until stiff. Turn into a buttered pudding-mould and steam for four hours. When serving, add lemon sauce.

BEST ANNUALS FOR THE HOME GARDEN

(Experimental Farm Note)

Annual flowers succeed exceptionally well in nearly all parts of Canada. For the "Home Garden", whether it be in the city or the country, the best annuals are the old favorites which have become so popular because they have fitted in with the needs of a large class of flower lovers. The reason for the popularity of the "annual" is that it can be raised easily and grown with but very little expense or labour. A few packages of seed costing five or ten cents each, a garden patch and someone interested in flowers form a combination which in the space of four or five short months may produce the most delightful results.

The old favourite annuals are the best because they have stood the test of time. In addition, they have been improved and increased in size, form and color by the plant hybridist and by the seedsman so that today they have almost reached perfection. In one hundred years or less they have made as much advance as most other forms of life have made in several thousand. The "poor man's orchid" is the descriptive term for the modern sweet pea and the term is legitimate because the sweet pea of today is wonderful. It is a new creation as compared with the sweet pea of a century ago. The same is true of many other annuals.

The favourite annuals are those which can be depended upon to give results. The final results will depend upon: Seed; 2. Culture.

1. SEED. Some annuals are difficult to raise from seed and, therefore, the best for the home garden are those which produce seed that will germinate well. The seed of such annuals can be dealt with in two ways: (a) It may be sown in pots or flats in the house and the seedlings transplanted to the garden or (b) it may be sown direct into the garden. Latitude and climate must settle which method is better for the greatest success although with many annuals either method might give good results.

2. CULTURE. The culture of an annual flower is not a labourious task or trial of skill. The cultural directions are generally printed on the seed packages. Soil, cultivation and rainfall are three factors of importance. Soil should be of garden loam quality and neither too sandy nor too heavy. Barnyard manure will stimulate good growth. Cultivation will keep the growth vigorous and healthy. Rain or artificial watering not less than once a week in the early stages of growth is almost essential. Annuals are splendid for purposes of cut bloom. Some of the best for this purpose as well as for garden display are as follows: China Asters, Sweet Peas, Nasturtium, Sweet Sultan, Sweet Scabious, Snapdragon, Everlastings, Zinnias, Pot Marigold or Calendula.

Other good annuals are:— LOW GROWING: Pansies, California Poppy, Mignonette, Petunias, Portulaca, Plinks, Drummond Phlox, Verbena.

MEDIUM HEIGHT: Everlastings, Balsams, Coreopsis, Larkspurs, Gallardia, Clarkia, Salvia, Stocks, Poppies.

TALL GROWING: Cosmos, Heliotropium, Tall Larkspurs, Nicotiana, Salpiglossis, Sunflowers.

That the soundness of the eye should be tested by a threatened blow of the hand. If the horse can see he flinches on noticing the approach of the hand, otherwise there is no winking of the eyelid. This test is useless, if not very gently done. A blind horse will strike, if he feels a column of cold air wink the eye, or if the fingers touch one of the long hairs projecting from the skin under the eye. Look for these long hairs. They are called "tentacles," have special nerve endings, so are sensitive and when touched communicate the message of impending danger to the brain, and the eyelids instantly close. They serve the same purpose as the long hairs or "feelers," projecting from each side of the muzzle of the cat, and in the horse also are found in the region.

POULTRY

DETECTING CHOICE LAYERS

My wife called my attention one day to the pelvic bone test for detecting choice layers. She had forgotten just where she received the information, but thinks that it was probably in one of the farm papers. I have, followed the test carefully since, and I am greatly convinced of its importance. I am giving it here because I believe all keepers of chickens should know the test.

To apply the test measure the width between the horns of the pelvic bones with the fingers. If three fingers will lie easily between the horns the hen is in all likelihood a choice layer; if two fingers lie between the horns the hen may be a fair layer, but is assuredly not the best; if only one finger can be inserted between the horns the hen is a very poor layer, and should be culled from the flock.—E. V. L.

RESEARCH WORK ON POULTRY DISEASES.

By A. B. Wickware, Assistant Pathologist, Biological Laboratory, Ottawa.

For a number of years investigations have been conducted in Canada, to determine the nature and prevalence of diseases of poultry.

The need for further research is emphasized by the fact that the exigencies of war-time have given a stimulus to the poultry industry, and it is natural to assume that this additional interest has led to an increase, rather than a decrease, of poultry disorders.

When the work was first started by this department, very little was known about the diseases of fowls in this country. In order to cover the ground thoroughly, poultrymen were requested by press notices, correspondence and personal appeals to co-operate as fully as possible by sending in sick and dead birds for study and diagnosis. In pursuance of this policy, the department guaranteed express charges, and in the last five or six years, the examination of specimens has become a task of considerable magnitude.

It therefore seems timely, when economy is the watchword, to make a few suggestions as to what work we desire to undertake, and to point out the various causes which result in individual deaths in flocks, and which can be easily recognized by the poultryman at home. In this connection, it may be pointed out that live and dead fowls are frequently forwarded to us via express from remote districts in British Columbia, Alberta and Saskatchewan, and the expense of transporting these birds is wholly unjustifiable where the losses are limited to one or two fowls.

From a study of our records, individual losses may be attributed to the following conditions, none of which can be transmitted to other members of the flock:

Affections of the Heart:—These are usually manifested by a quantity of fluid within the covering membrane, and in some instances by an accumulation of yolk-like material, the result of inflammation.

Rupture of the Liver:—This occurs in fowls which are excessively fat, and is recognized by sudden death, and the filling of the bowels cavity with blood.

Poplexy, or rupture of a blood vessel in the brain:—This disease can be determined only by the absence of other lesions, and the suddenness of death.

Peritonitis, or inflammation of the bowels and covering membranes. Peritonitis is caused by the partial development of eggs in the bowel cavity; closure of the egg-duct by large eggs; or accumulated yolk material, etc. Frequently the diseased ovary is responsible for this latter condition.

The above diseases are those usually responsible for individual deaths, and may easily be detected by examining the birds.

The infectious diseases which spread rapidly through flocks concern us chiefly. Such diseases as Fowl cholera, Tuberculosis, Blackhead in turkeys, Roup and Coccidiosis may be classified as infectious, and it is essential that they be recognized early, so that their spread may be checked. Worms are also very troublesome, and we have already published directions for getting rid of these parasites. These bulletins may be obtained upon application to the Publications Branch of the Department.

If poultry owners desire to have parasites identified, the parasites—preserved in alcohol and securely packed—may be sent by mail to the laboratory. With reference to Tuberculosis and Blackhead, our bulletins fully describe these two diseases, and any

poultryman should be able to diagnose them after reading our literature and seeing illustrations.

To prevent misunderstanding of the aims of the department, we wish to restate that we are desirous of investigating affections which are responsible for large losses.

In cases of suspected poisoning, a public analyst should be consulted, as we do not undertake work of this nature.

As previously stated, where only one or two deaths occur, the express charges usually total more than the market value of the birds.

We trust, therefore, that poultrymen will assist us in our economic policy and send fowls only when several deaths have occurred simultaneously and the cause cannot be determined at home.

Barring weather injury, quality and yield go together. Large yields per acre generally go hand in hand with grain of beautiful appearance and uniform excellence, and vice versa. The farmer thus receives generous remuneration for his labour, but what is more important, in striving for quality he will find his greatest reward not only in increased yields and larger profits, but in the satisfaction that attends the application of intelligent and concentrated effort.

MOULTING HENS

From the number of inquiries which Mr. D. O. Barto has received recently asking for information or directions concerning the proper treatment of hens to induce early and rapid moulting in order to secure an increased number of eggs in late fall and in the winter months, it is evident that the idea prevails with many that this method of increasing winter egg production have been proven to be successful.

"However, this is not the fact," says Mr. Barto. "A very careful and thorough experiment to test this question was conducted a few years ago at Cornell University Poultry Experiment Station. The method that is used to produce rapid moulting is to starve the flock for about three weeks by cutting the rations to one-third the usual amount and then rapidly increasing the feed to all the birds can be induced to consume. This causes a rather sudden dropping of the old feathers by the Cornell Experimental Station found that the hens thus treated produce fewer eggs during the fall and winter and at greater cost per dozen than did the hens fed normally."

It is better to feed the fowls an abundance of nutritious food, quite rich in protein and fats during the moulting season, but not to attempt to force the moult by any patent stimulating foods.

BREAKING UP THE BROODY HEN

There are very few poultry breeders who have not had laughable and provoking experiences with broody hens, for these persistent hens are both amusing and annoying. About the only breeder who does not face the problem of breaking up the broody hen is the man who raises Leghorns, and sometimes these hens become very anxious to be mothers after they have passed two or three summers.

A poultry journal once offered prizes to the readers who would send the best methods of breaking the sitting hen. The editor of the paper must have had some hearty laughs at the plans proposed by his friends and readers, for over 1,500 of them sent in replies, some very amusing indeed. One breeder suggested tying a bright red ribbon around the hen's neck, with the bows extending far out at each side. He said the old hen was so busy looking at her tie and admiring her self that she forgot her nest.

Another said he placed a rooky coop on a very steep hillside, and the hen could not sit comfortably, so they "took to" the perches he provided and roosted instead of sitting. In a few days they were clear out of the notion. Another said he tied a barrel under a tree, put a wire mesh door on each end of the barrel and put his hens inside. When they tried to cuddle down the barrel kept tilting up and down, as the thing was hung from one rope fastened in the middle of the barrel. Still another advised putting a chunk of ice in the nest, another a piece of slate roofing, and yet another suggested a Teddy Bear. Placing the broody hen in a pen with kittens or pet rabbits will also change her mind, so some one said.

Growing ducklings thrive best on a feed composed of equal parts, by measure, of corn meal, ground peas, bran and middling, all made into a thick mash, either with scalding hot water or milk, the latter being the best. The mash, either with scalding hot water ground stuff, and a few handfuls of coarse sand.

TURF

HOW TO BREAK REARING HORSE

I have had considerable trouble with rearing horses and have found that they can usually be broken by the following method and especially if they are young and taken in time: Place a rope or strap surcingle around the body just back of the forelegs and fasten a pulley on either side of this. Take about 20 or 25 feet of 1/2 inch rope and run the ends through the pulleys. Fasten them around the front legs just below the pastern joints. Keep the loop end in your hand and when the horse is well up in the air, draw his feet up against his belly. When he comes down he will be forced to light on his knees. This is not advisable on a hard road as there is danger of injuring his legs, but a few lessons of this sort on the grass or in a plowed field will not soon be forgotten.

LU PRINCETON, 2.02.

By W. H. Gocher.

At the close of 1918, Lu Princeton was considered the best trotter in training. In his last race at Atlanta, he defeated St. Frisco in 2.02, 2.04, 2.02 1/2. This showing, when added to his victories at North Randall in 2.02 1/2, 2.02 1/2, and at Hartford in 2.02 1/2, 2.02 1/2 on Labor Day, stamped him as the leader among stallions raced in free for all. While St. Frisco trotted two miles in 2.01 1/2, in races and The Harvester one in 2.02, neither of them were forced to repeat so near the limit of their speed.

Lu Princeton, like Mabel Trask, is a striking example of what careful training will do in developing a race horse. The latter could have been spoiled at any time by the stroke of a whip, while the former had to be literally forced to uncover all of the speed at his command.

This horse has been raced for four seasons. His first start was at Rockport, Ohio, August 9, 1915, when he won a seven heat race in 2.17 1/2. In his other races that season, he was defeated in two by Cedar Lake Girl and in one by Brione, after which he passed into the stable of Walter Cox. In 1916, his first season on the mill tracks, Lu Princeton looked like anything but a champion, one second, two thirds, and four fourths being all that he had to show for ten races, his only redeeming trips being a heat which he won in 2.09 1/2 at Atlanta and a second in 2.06 1/2 to Early Don at Lexington.

The returns for 1917 and 1918 made these performances look like misfits, as of twenty-four races he won sixteen and was second in seven. It also reduced his winrace from 2.17 1/2 to 2.02, which is the fastest standing to the credit of any trotter now in training with the exception of his stable companion Mabel Trask, 2.01 1/2. During his career, Lu Princeton has started in thirty-nine races of which he won seventeen, was second in eight, third in four, fourth in six, and unplaced in four. He has trotted one hundred and thirty-two heats of which he won forty-nine. Of that number forty-four were finished by

low 2.10 and nineteen below 2.05, sixteen of the latter being placed to his credit in 1918. The summaries of his races also show that of the twenty-two which he lost, four of them were won by Early Don, four by Early Dreams, three by St. Frisco, two each by Cedar Lake Girl, Zomrect and Royal Mac, and one each by Brione, Lindsey, Brisac, Brescia, and Azora Axworthy.

The inheritance of Lu Princeton is a striking example of the breeder's art in adding layers of recognized trotting strains to a thoroughbred pedigree. He was got by San Francisco, whitefish maternal line runs through mares by Princeton, Dictator, King Rene, to the Pilot Jr. mare Kathleen, who also produced Ethelwyn, while she was out of the thoroughbred Little Miss by imported Sovereign.

AMONG THE HORSES

HORSE OWNERS.

By W. H. Gocher.

One day John Splan, when in a philosophical mood, said that it required more skill to train an owner than the horses on which he was paying the bills. Of all drivers, Splan was in better position to give a correct opinion on horse owners than any man that ever sat in a sulky. In his day he had all kinds from Eph Simmons to L. V. Harkness, from Jerry Monroe to General Caldwell, and from Dan DeNoyells to C. E. Emery.

As Splan was rather careless in his business methods, especially during the racing season, owners experienced considerable difficulty in making settlements with him, but if they did not bother him he always saw that some day they had a chance to balance all of their expenses by landing a coup at attractive odds if they were willing to take a chance in the betting ring.

At one time Splan trained an attractive mare for an Englishman. She was in his stable for two or three years and he never seemed to be doing anything with her. Finally it was decided to give her the grand preparation but instead of the work beginning in the spring, it was started in July. She was ready in September and started at the Cleveland fall meeting. No one, however, supposed that she would be turned loose at that time of year, so the wise men backed what they considered the choice while this good trotter was sold for a trifle in the field. Someone had to buy them, and when she won, Splan gathered in enough to winter on. As for the owner,—well, he had the same chance.

In order to remain on the turf, there are three things that an owner must have. The first item is a horse. If it is one of the Joe Patchen or R. T. C. kind, he can cut out the other two. If it is a flash or apt to show the white feather when pinched, he must have the other two. They are patience and the means to settle, if the outfit slips a cog and it usually does. If there were no foils in racing, there would be no thrills. If all the joy was in one outfit, there would be no field buyers.

While there are horse owners who believe that fortune favors the bold, the average man, who has been to the mill a few times, will tell you that the gentleman with the latest information can trim the bold boy to a frazzle. None but children and fair maidens believe that all of the starters are out to win. While it would make merry racing, what would become of the helper, who never fails to collect, the weak-kneed individual who is afraid of a mark, to say nothing of the man who is legging one up for a killing at the next town? Each of these has a part to play in every race and while all of them think that they are pulling the wool over the eyes of the judges, they usually find when they cut loose that they have drawn a blank.

Owners who race horses for the love of the sport and who take good and bad fortune with a smile are the men who are a credit to the turf. There are times it is true when they are forced to mingle with those that are just the reverse but public opinion and the strong arm of the racing officials are constantly putting the latter on the shelf. One day Senator Baily declared that "the cheater must go." He did not say where, however, and after a few years experience one is prone to admit that he is more apt to drift toward the betting ring than the gate. What he gets there is his own business but what he does with it is another matter.

The Moko—Sybil Knight colt General Knight, that cost A. H. Cosden \$6,025, as a yearling at the New York sale last November, has been

passed upon and unqualifiedly approved by the critics of the Walter Cox training colony at Dover. Guy James, Lu Princeton's able caretaker, and George Bates, who looks after the comforts of Mabel Trask, are enthusiastic over the Moko colt. Cox himself, who is a fund of information (not), is saying but little about General Knight, but those closest to the lanky trainer are confident he is highly pleased with the Cosden two-year-old.

Moko is the sire of Mr. J. H. G. Murphy's stallion, Prince Marjor, Charlottetown.

DETECTING BLINDNESS IN THE HORSES

In a discourse on detecting soundness in horses, Dr. A. S. Alexander, the well known authority says, re-examining the eyes: Coming to a region of the eyes remember that a deep depression above the eye, or surp orbit, as it is technically termed, is most marked in the old horses and practically absent in the young one, the part being filled with fat. To make an old horse appear younger, the "gyp" horse dealer fills the cavity with air, a trick called "puffing the gylms." The finger detects this at once, as a cracking sound is emitted on handling, and in addition one will notice that the hair on the temple of an old horse has turned grey, while the lower jaw bone feels sharp and thin, and the bearing of the grinding tables of the teeth also tells the story of advancing years.

In a dark place the pupils of sound eyes dilate, so lead the horse into the light and notice if contraction of the pupil occurs. If it does not, the eyes are unsound. In blindness from paralysis of the retina and optic nerves (amaurosis, or "glass eye") the pupils are permanently dilated and the eyes consequently appear unusually bright and prominent, although the horse is "stone blind." Such a horse can look squarely at the sun without blinking.

FARM

BEE DISEASES.

(Experimental Farms Note.)

There are three brood diseases that are of importance to the bee-keeper, and two of them are responsible for very heavy losses every year.

Sacbrood is an infectious disease but transient in character. It may be serious enough at times to weaken a colony in the apiary mostly during the spring and early part of the summer, but cases may be found at any time during the season. The symptoms are irregular brood and punctured capping; the affected larvae are usually dark grey to almost black in colour and are found lying stretched out on the lower wall of the cell at the entrance. The body wall of the diseased larvae becomes toughened while the contents of the body are somewhat watery and granular; the whole can be lifted from the cell intact. There is no definite treatment for this disease, but the keeper who keeps his colonies at the maximum strength and uses only young vigorous queens need not fear it.

European foul-brood is a highly infectious disease and spreads very rapidly through an apiary, causing

Continued on Page Eleven

Can't Beat "Tiz" When Feet Hurt

"Tiz" for sore, tired, puffed-up, itching, calloused feet or corns

"Sure! I use 'Tiz' every time for any foot trouble."



You can be happy-footed in a moment. Use "Tiz" and never suffer with tender, raw, burning, blistered, swollen, tired, aching feet. "Tiz" and only "Tiz" takes the pain and soreness out of corns, callouses and bunions. As soon as you put your feet in a "Tiz" bath, you just feel the happiness soaking in. How good your feet, old feet feel. They want to dance for joy. "Tiz" is grand. "Tiz" instantly draws out all the poisonous exudations which puff up your feet and cause sore, inflamed, aching, sweaty, smelly feet. Get a 25-cent box of "Tiz" at any drug store or department store. Get instant foot relief. Laugh at foot sufferers who complain. Because your feet are never, never going to bother or make you limp any more.