CHANGES IN STYLES.

RADICAL DEPARTURES IN EARLY FALL MODES.

Skirts to Be Correct Must Be Close-Fitting—Collars Must Come Down—New Costumes that Are Copied from Those of Our Grandmothers.

New York correspondence:

ANY changes are apparent now that fashionable women have donned their fall gowns. The shifts of style are greater in number and more marked than is usual at this season, despite the fact that summery stuffs have been employed to carry out some of them. Changes in outlines are the most striking features. These are almost as radical as they were that season several years ago when of a sudden we took to spread-out skirts as a jump from close ones. Have women been wearing their collars built up about their throats? All right, but down they come! Fashionables will go back to the pictures of their grandmothers, who probably had prettier throats than most women nowadays, and will drape their necks in all the simplicity of the fichu line. Can it be that the round waist and belt line and the differentiation between skirt and bodice were imperative? Then let women this season connect skirt and bodice, either princess fashion, by allowing the ends of the fichu to hang below the belt. Or by extending the trimming of the bodice below the belt. Did they ever wear a swishy short skirt that fluttered about their ankles and showed its lining with every swoop and swirl? They did, but now they will put themselves into a sheath skirt with close hanging train. If they follow the model of to-day's first sketch they will carry out some of these new ideas in soft gray nuns' veiling, trimming with silver and white embroidery. Whether they copy this model or the others, making old clothes over will be rendered nearly impossible. That must be given up and last season's dresses must be put away in the hope that fashions will come around to them some time.

The next pictured model seems like a bold change, yet it is a fashionable one. It means a dash into polonaises and elbow sleeves, flat shoulders and clingy skirts, a struggle for quaintness and an attempt to cultivate a glide to make the clinging skirt "follow" properly. All this makes toward reproduction of the costumes of romantic days. The polonaise is, perhaps, the most aggressive of the revivals. A really picturesque adaptation of it is shown in the gown sketched, which will show itself at one of the first afternoon teas of the new season. The skirt of smooth cloth in soft lavender was made plain and sweeping. The polonaise of white taffeta figured with lavender, purple and violet and edged with a little frill all around, might, elbow sleeves and all, have come right out of a twenty-year-ago trunk. A belt of violet velvet matched the straps of velvet that crossed the white lawn front. A violet velvet bonnet that was really nothing but an upstanding brim banked from and back with white violets completed the costume, with which elbow loose gloves of ivory tint were worn. A white chiffon-covered parasol was carried just to prove that the costume was a fall affair intended for country use, and not planned for the city.

For those who regret the blouse and the jaunty blouse jacket of last season there is some comfort in the new velvet jackets that are being worn at the mountains and even in the city. They give a protected cosiness of effect, like a little outer jacket, but are really a part of the costume and blend with the rest of the gown in color. The one pictured here was hunter's green velvet, the skirt being a much lighter and grayer shade. The stress up the back of the skirt did much to emphasize the sheath-like closeness of the garment, and matched the jacket in color. The pronouncedly high plain stock was a part of the jacket, was of silk to match the skirt, which the belt matched. A beautiful scarf of fluffy lawn embroidered in green started under the chin and fell free nearly to the hem of the gown.

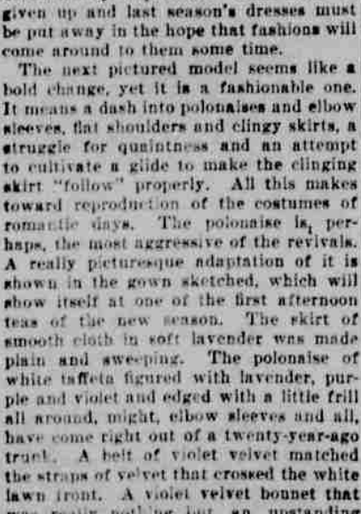
Capes along the lines of that shown here appear in all sorts of variations. They are sure to be the theater wrap of the coming season, and just now they are much used for fall driving. Exquisite old lace shawls are being sacrificed to the fancy, which is an outright shame, yet the effect of a lace cape with deep double ruffle all around that narrows into a mere edge of foam under the chin, is certainly charming. This cape had an exquisitely lace-like look, and was made of soft net laid over black taffeta. The net was embroidered in delicate natural tint vines and leaves, and a little hood was a feature of the garment. Such garments will surely see wear this season at the opera, and at evening affairs where the outer garment will show a little and not merely be poked away in a dressing room. The high collar of the cape gives added fluffiness about the head when the hood is drawn up, affording another lovely feature for it.

At most seasons when a set of new styles is appearing there is temptation toward saying that lace is to be worn more than usual. This is because there are almost always at such times at least a few new model costumes that are made exceedingly rich with lace trimmings. Lace is abundant this year, and while its free use is permissible, many very elaborate new costumes are enriched by other means. The dress remaining in this picture was of these. It was made princess from leaf brown broadcloth. Polonaise outline was suggested by applique of great oak leaf figures cut from a dull grayish brown silk. The edges of the leaves were bound in dull red and deep orange, and were allowed to roll up a little. Epaulettes and edge to yoke were finished by the leaves. Yoke of orange silk and plain cloth sleeves finished the gown, the plain collar of which was lifted to above the ear tips at the sides and curved out for the chin.

The influence of the wheel skirt on the regular skirt is marked, and some of the latest street skirts button at either side and fit without a fold at the back, all spring being held flat till below the hip line. Trace of the shield front remains in flat fronts extending below and over the belt. These features make interesting the next model that had the artist's attention. Here it was carried out in black mohair, with black braiding and buttons, and a smooth front of white pique. Unless such a dress is purchased by a woman of wealth, its front will be replaced by silk or lace later in the season.

In some new cloth dresses the most ingenious effort has been made to follow the figure's outline at the back without wrinkle or ripple. The remaining dress of those the artist sketched was one of these, and demanded as much, in its midway section, at least, of both wearer and maker as a princess model would. It was of soft cashmere, with skirt extending above the belt line in the back and buttoning down to the beginning of the folds of the sweeping demi-train. Above the prolonged skirt line the bodice was heavily covered with black braiding, through which the deep purple of the gown showed handsomely. Its quaintness was much enhanced by close sleeves and a collar that was comparatively low and loose at the back.

ELABORATED FROM THE KNEES UP.



NEW SNUGNESS AT THE HIPS.

FASHION NOTES.

Tailor-made gowns will have flounces on the skirts.

Steel and malachite form a combination noted in the newest buckles.

Lace coats are much worn. They are three-quarter length and round in front.

Velvet is to be worn, tucked, stitched and strapped, even as though it were cheaper material.

Girdles and belt buckles in metal, set with a variety of gems, appear to be gaining in popularity.

Note pads with silver or ivory covers ornamented with silver are more popular than ever as articles for the chatelaine.

The latest patriotic design is a crystal button with a spread eagle on a shield. The coloring of the eagle is especially attractive.

Poppy-red will play a cheerful part in coming fashions and a handsome gown is in cherry and white taffetas, trimmed with black velvet ribbon.

It is the proper thing to wear embroidered silk stockings to match the gown. Very exquisite hosiery is worked in tiny rosebuds, violets or forget-me-nots.

Superb white watered silk, such as delighted the stately dames of olden times, will be a favorite material for bridal dresses next season. The moire fabrics of to-day.

Ribbon trimmings will be much used in millinery on both hats and toques. This is a sensible fashion, since ribbon is not easily hurt by uncertain weather. The wide directoire toque still remains popular.

The newest bathing suits are made of bunting, with a coarse lace yoke and neck, waist, knee and sleeve bands of cream military braid. Bunting sheds the water more readily than brilliantine, but the best material of which a bathing suit can be made is all-wool or wool-and-silk Jersey cloth.

AGRICULTURAL NEWS

THINGS PERTAINING TO THE FARM AND HOME.

Cheap and Rapid Way to Get Rid of the Pestiferous Chinch Bug—Proper Feed for Milch Cows—Value of Bees to Fruit.

Proper Feed.

The class of feed fed to such cows should be well balanced and not be overcharged with starchy substances in the form of carbo-hydrates, the range of which should not be too wide nor too narrow; for summer, would suggest that one pound of protein to six pounds of carbo-hydrates, and one to seven in winter. June grass is almost a balanced ration, yet we find that a small quantity of bran and gluten meal seems to stimulate the flow of milk, and at the same time add texture to the butter that aids it in standing up while carrying to market. For winter we feed a ration of grain of from six to ten pounds of ground, and mixed as follows: Fifteen hundred pounds of corn, 1,500 pounds oats, 1,000 pounds bran and 500 pounds of gluten meal mixed. In the absence of gluten meal use 350 pounds of oil-cake meal and as much cut corn-stover in the evening and clover in the morning as the cows will clean up. Salt liberally three times each week and water twice a day and keep indoors as much as is practical.

Good Money for Choice Lambs.

The markets for early lambs have not been too heavily supplied, and the demand at good prices, seems to be increasing every year. It is not every farmer who gets the best prices for his early lambs, however, because they do not ship them in the best condition. The choicest lambs are not produced by turning the ewes out to forage and provide for the lambs, but the young animals are carefully watched and given ground oats as soon as they will eat it, the ewes also being provided with grain and plenty of clover hay at night, whether the pasture is good or not. What are termed "hot house" lambs are not the very earliest always, as they are frequently stunted in growth in their first stages, but the ones that are pushed from the start and kept warm until the milder weather comes. Late lambs must also be looked after, as they can be gotten into market in a condition so as to command extra prices. Lambs pay a large profit if they are given care from birth to market.

The Popular Leghorn.

The Leghorn has the well-earned reputation of being able to shell out more eggs from a given amount of food than any other breed. The eggs are of fair size, light in color. The hen is a splendid forager and should have wide range, although she will do well in confinement if kept at work. Leghorns mature very early, sometimes at fifteen weeks of age. For poultry they are inferior to the larger kinds, but the breed is best adapted for the egg specialist. They are hardy and vigorous. Skin and legs are yellow. The comb is large, but in a properly constructed house will give little trouble from freezing. If yarded in summer their wings must be clipped or they will fly over any ordinary fence. As to color of Leghorn there is little to choose between the varieties. The white is sometimes called the best layer, but the brown, if not equal, is at least a very close rival.

Home-Made Water Hose.

Take a piece of heavy ducking thirty feet long; cut it lengthwise into three strips; bring the edges together, double over once, and with a sewing machine sew through the four thicknesses twice. When sewed, dip it in the mixture of five gallons of boiled linseed oil and half a gallon of pine tar melted together. Put the hose in a tub, pour on the hot oil (about 160 degrees) and saturate the cloth well with the mixture; then tie one end of the hose and blow into the other until it has air enough to keep the sides from sticking together; hang on the clothes line and it will be dry in a few days. Your hose is now in three sections, thirty feet long. To join these use a tin tube two and one-half inches in diameter by one foot long. Keep it tied to one end of the hose all the time; to connect, draw the open end over the tube and tie securely. Connect with the tank by using the hose over the end of pipe projecting from water butt, and then turn the water on.

To Destroy Chinch Bugs.

The ravages of the chinch bug have become so great in some localities that the farmers are experimenting with every device that gives promise of destruction to this pest. The latest method is nothing more than an ordinary gasoline blow-lamp, such as is used by painters to burn off old paint. When the bugs leave the wheat and oats to go to the corn a man with a blower can go up and down the first few rows and kill a million bugs in a short time. The flame from the lamp destroys the bugs, and strange as it may seem, does not injure the corn.

The Plague of Flies.

Flies are always a product of filth. They cannot be bred where matter offensive in some form is not present. They help to purify the air wherever miasma is present from decomposing animal or vegetable matter. Unusually it is either an open slop sink by the side of the house or the manure from the horse stable or pigpen in which flies are bred. Neither of these should be allowed near the house. All the waste matter from the house should be conducted to an underground receptacle, where it can be purified and thence taken to the fields and plowed under as a fertilizer. Merely freeing animal matter from offensive odor does not detract from its fertilizing properties. In the strongest of all fertilizers there need be no offensive smell.

Stained Barley as Feed.

Whenever barley is badly colored by rains it is greatly injured for brewers' uses, and if the barley has gone to the point of germinating it is completely ruined, as this barley will never sprout again. But such stained and sprouted barley after being fully dried can be ground, and its meal makes an excellent feed for either pigs or hogs. Sometimes this injured barley is fed to horses, but caution is needed not to give large feeds of it, as barley, being a heavier grain than oats, is more apt to cause colic. The barley feed is, however, better than feeding corn. If barley is used for hog feed, mix with it some fine wheat middlings, which are much more palatable to hogs than bran is, and which are needed to counterbalance the excessive amount of starch in the barley meal.

Value of Bees to Fruit.

There are very few complaints now about the injury bees do to fruit in Southern California. At the farmers' institute praise is almost always given to the bees. This is a very wholesome change. Recently I was where I had an admirable chance to observe bees on fruit, especially peaches. The wasps would wound the fruit, and then the bees would swarm on the sweet, juicy peach and save the juice. I looked long, and never saw a bee alight on a whole fruit. They do not do things that way. At the dryers they were much around the soft fruit, but I did not see them on the fruit on the trays. I suppose that the sulphuring keeps them away, though the sulphuring is done for another purpose. It is likely ever to come thus—any evil that is necessary will soon find a cure.—American Bee Journal.

Renewing Raspberry Patches.

A raspberry patch, of the black-cap varieties, needs to be renewed every four or five years, as the red rust comes in and will injure so many of the plants that the plantation will cease to pay. The black-cap raspberry will not last so long as this if it has been grown from suckers. Those grown from the tip ends of this year's shoots will keep free from disease longest. But after four or five years it is too much labor to keep the plantation free from weeds, and a new plantation, after the first year, will give more fruit, with less cost of labor in caring for it.

China Nest Eggs.

It is never a good plan to allow a freshly laid egg to remain in the nest to induce laying in the same place. A china nest egg can be cheaply procured and will last forever. A hen's egg is liable to break and teach the bad habit of eating eggs. Even if the china egg should be broken, its shells contain no lime and will not be eaten. In the heated season the china nest egg should always be used.

A Dairy Hint.

It is very poor management to have the cows yielding milk liberally while on pasture, but when on hay in the winter season to be mere strippers. Give them warm stables, the right kind of food and water in abundance, and the income from them will be greater than that in the summer. Milk them early in the morning and feed them, that the interval may not be so long as to make them hungry and restless. All this pays well, indeed.

Hogs in Hot Weather.

During the very warm weather no animal suffers more than the hog. To feed corn to hogs at this season is to really torture them. The pen should be well supplied at all times with fresh water. Swill rapidly undergoes decomposition if the weather is warm, and should only be used when it is as fresh as possible. The best food for hogs in summer is plenty of green clover.

Notes.

Do not cut asparagus until the second year.

Dried apples find a very good foreign market.

Sweet peas must have plenty of sunshine and water.

We prefer smooth to the wrinkled varieties of peas.

The soil that is loose is the ideal soil for the potato.

If the orchard is barren try pruning and apply fertilizers to the ground.

Some orchards do not bear because the land is too wet, and drainage is the remedy.

There is no better remedy for cabbage worms and lice than water at a temperature of 130 degrees.

Buy asparagus roots of the nurseryman and set in rows five feet apart and two feet apart in the row.

If the roots of the grape vine or any other fruit bearing plant get out of the ground, and are not covered, the plant will droop and likely die.

If you can't build a silo it would pay you to grow mangels, carrots or rutabagas for your stock.

Soak scabby seed potatoes before cutting, in a solution of an ounce of corrosive sublimate to eight gallons of water. Remember, it is a poison.

Commercial fruit growing requires more attention than the general farmer can give it. But for home consumption every farmer should produce fruit.

Giving plenty of room between the plants is in line of preventing gooseberry mildew. So is thorough cultivation. In addition the leaves may be sprayed every fifteen days with a half ounce of liver of sulphur in a gallon of water.

Kerosene emulsion is made as follows: Hard soap, one-half pound; kerosene, two gallons; boiling soft water, one gallon. Dissolve the soap in the boiling water, then add the kerosene, and churn thoroughly together. Dilute with from five to twenty parts of water.—Plowman.

GUNNERY AND THE GUNNER.

To Fire a Big Gun Effectively Requires a Liberal Education.

Expert marksmanship on the part of land forces, whether of infantry or artillery, demands long experience and frequent practice. At sea the conditions make gunnery far more difficult, and but few persons who have not been aboard a warship or studied the theory of the art have any just conception of the problems which enter into the apparently simple matter of discharging a great gun. The thing is done quickly and easily, but if it is done well it is because of months of practice and the study of questions involving nearly every branch of higher mathematics.

When the man in charge of a piece of naval ordinance deseries his enemy he has various important details to consider. He must find the "range"—technically, the distance between a point vertically below the muzzle of the gun and the point of impact—and this he may do either by trial shots gauged by his judgment or by means of the "range-finder," which is an appliance for hastily computing distances in accordance with well-known methods of mathematical calculation, the "finder" using the ship itself as a base line for the delineation of a triangle of which the target is to the the apex. Once the range has been ascertained the gunner must sight the piece, the sight in use for some of the large guns being a telescope fitted at eye-piece and object glass with hair-line wires crossing at right angles at the center of the lenses, a correct aim being found by getting the target in line with the intersections of the two sets of wires. Owing to the introduction of electricity, which makes it possible to fire a gun instantaneously and by the touch of a button, the discharge is so quick that the gunner need not stop to consider the effect of the pitch and toss of the ship, the projectile being well on its way before the vessel has had time to roll.

But he has other problems to face, and here his study of the theory of gunnery comes to his help. In the first place, the gun itself may be in motion, due to the progress of the ship as it maneuvers. Imagine a gunner placed on this unstable platform and having for his target an almost indistinguishable object, so colored that its outlines blend vaguely with the waters, two or three miles distant. The target itself may be moving in one direction as the gunner's ship moves in another; a strong wind may deflect the projectile from its course; the distance may be unknown, and so may the rate of speed of the little strip of steel hull on the horizon. The gunner must know, too, what elevation of his canonn is necessary for a given range, as the same elevation in one gun will not answer in another. The momentum of a shell is calculated as equivalent to its weight multiplied by its velocity, large guns having thus a wider field of effective operation. Yet a good modern gunner will be able to find the distant vessel and drop tons of explosive shells on its decks; and, as the war has demonstrated, the American gunner excels at this business.

This is so largely because of the splendid training adminstered at the nation's naval academy and the wise extravagance of the government in providing opportunities for practice. Behind all the skill due to experience is the gunner's knowledge of the theory of his art, which makes it possible for him to work understandingly, gives him superior resources in time of need and enables him to know why and how one method will produce better results than another. The intricacy of the problems involved may be imagined from the fact that the computation of range tables includes not only the consideration of sea-service conditions, but takes into account such matters as windage, velocity, muzzle energy, weight of metal thrown, atmospheric resistance and even barometric and thermometric conditions. The naval student must summon algebra and trigonometry to his aid in computing the equation of forces which will land a shell on a distant cruiser. He does not work out these problems in battle, of course, but his past study of them gives him a high efficiency.

Mastery of these details, a natural gift for handling machinery and a fine native bravery and manhood have won the naval battles. The American "behind the gun" is not only a good mathematician and a good mechanic, but a cool and intrepid fighter.—Chicago Record.

Chips that Are Coin Current.

There are few people in Boston who would know how to correspond with "chip letters," which are no letters, but simply emblems, yet up or down in Maine "chips" are quite significant. If you should receive a piece of pine with a knot-hole you would know that your correspondent thought you to be false-hearted, but a piece of pine intact means, "I am true to you." A pine root is a token of firmness and stability, and signifies, "My love for you is strong and true," but a decayed leaf or a brown one indicates "My love has grown cold" or is "dead." At a down East party a love-sick swain roughly prints an "I" on a pine chip and hands it to his adored one, meaning, "I pine for you." She hands him a knotty piece of pine intended to convey the reassuring message, "Pine not." Later if she thinks him treacherous she sends him two tiny chips tied with a piece of snake skin, but she will be reassured if he returns a pitchy chip, meaning, "I will stick to you." If she should scorch the edges of this chip and return it, it means that she didn't believe him, and will "roast" him, and if a small plain pine chip accompanies it, it means he may keep on "pining." If, on the other hand, the suitor thinks he has a rival, he sends two twine twigs, but if she returns a cone he takes heart, for it means that as only one cone can grow in one spot at a time so only can he hold one place in her heart. Then he will doubtless propose by sending two cones tied together with a ribbon, and if acceptable she will send him a piece of pine tree bark, meaning, "I take you for my protector through life." If you know of any parties who can't read or write, but who are in love, tell them of this simple language of the pines, and they may find tongue in trees if they do not find sermons in stones and good in everything.—Boston Traveler.

QUEER STORIES

Queen Victoria signs about 50,000 documents every year.

When an Arab enters a house he takes off his shoes, and not his hat.

Nearly 40,000 men desert from the German army every twelve months.

One hundred and twenty firemen are required to feed the furnaces of a first-class Atlantic steamer.

A fertile source of baldness is clipping hair close to the scalp, and thus exposing the roots to the cold.

A physician asserts that the pain of neuralgia, if superficial, can be relieved by throwing a beam from a bright arc light upon the affected part.

The use of red parasols has been officially forbidden in many villages of the Tyrol. The peasants say that the startling color irritates the grazing cattle.

Paris policemen are provided with pieces of chalk with which to make a mark, in case of an emergency, on a suspected person's clothing. The stratagem is especially for use in a crowd.

When a prince of the Austrian royal family dies his horse follows the funeral, covered with a black cloth, and lame in one hoof. The lameness is produced by driving a nail through the horseshoe.

The population of Cuba in 1894 was given as 1,631,696, of which 65 per cent was white and 35 negro. These proportions are not quite correct, however. About 58 per cent. are white Cubans, 31 per cent. negro, and 11 per cent. Chinese and Spaniards.

The light house on Armish rock, in the Hebrides, is about 500 feet from the shore. To avoid having an attendant on the rock, the light is produced on the shore and projected across the water upon a mirror in the lighthouse, the mirror reflecting the light in the desired direction.

The very first living thing to appear upon the surface of our globe, in other words, the earliest distinctly organized animal whose fossilized remains are found in the rocks which go to make up the earth's crust, was a three-lobed worm called a trilobite. According to the geologists, it was the first created being that had a distinct animal organization.

He Was Slightly Mixed.

"In a little village near the Cumberland River, in the Pennyrile, recently I saw a blushing bride, a nervous best man and a minister, the characters in a laughable comedy," said Walter Wade, the "Kentucky Traveler," to me this morning. "It was at a church wedding, in which two of the society people of the town were the central figures, and a nervous young farmer the best man. The chief male attendant was so overcome with excitement during his march up the aisle that he was temporarily dazed. At the altar, after the clergyman had said 'Do you take,' etc., and the time had arrived for the minister to place the ring on the bride's finger, the best man became confused and handed the preacher a bone collar button instead of the gold circlet. The good man tried to put the collar button on the girl's finger, couldn't, halted and finally said: 'Jim, gimme the ring.' There were momentary blushes, a titter among the younger element in the pews, and a wild look of despair; then the best man located the ring and the ceremony was concluded."—Louisville Post.

The Deadly Upas Tree.

Most people have at least heard the story of the deadly upas tree of Java, of which it was at one time said that to merely approach it was certain death. This story was treated as an absolute fable, but now it seems as if there was actually some basis of real fact for it.

The upas tree is a real tree, and a very big one. In the old trees the bark is over an inch thick, and full of a thick, milky juice, the merest touch of which upon the skin produces a most painful and irritating rash.

What is more, a gas arises from this juice which has a most poisonous effect upon any one near it. It is sometimes used by the natives for satisfying private revenge, for a cup of it hidden in the room of a sleeper produces stupor and eventually death.

Earth's Speed Not Uniform.

It is an interesting fact that the earth does not travel at the same ratio in all parts of its journey through space. Its orbit being elliptical, it must at some time approach nearer to the sun than at others, and will take less time in moving through one part of its path than through another. In winter the earth is nearer the sun than in summer, and moves through space more rapidly.—Chicago Chronicle.

The Way We Look at It.

"There is some difference between a joke and a mean trick."

"That's so; a joke is a mean trick that you play on another fellow, and a mean trick is a joke that another fellow plays on you."—New York World.

How anxious people are to carry the valise for a man who is going away on a long trip! It is the same kindness that prompts them to be kind to a man who is fatally ill, and who is shortly going away never to return.