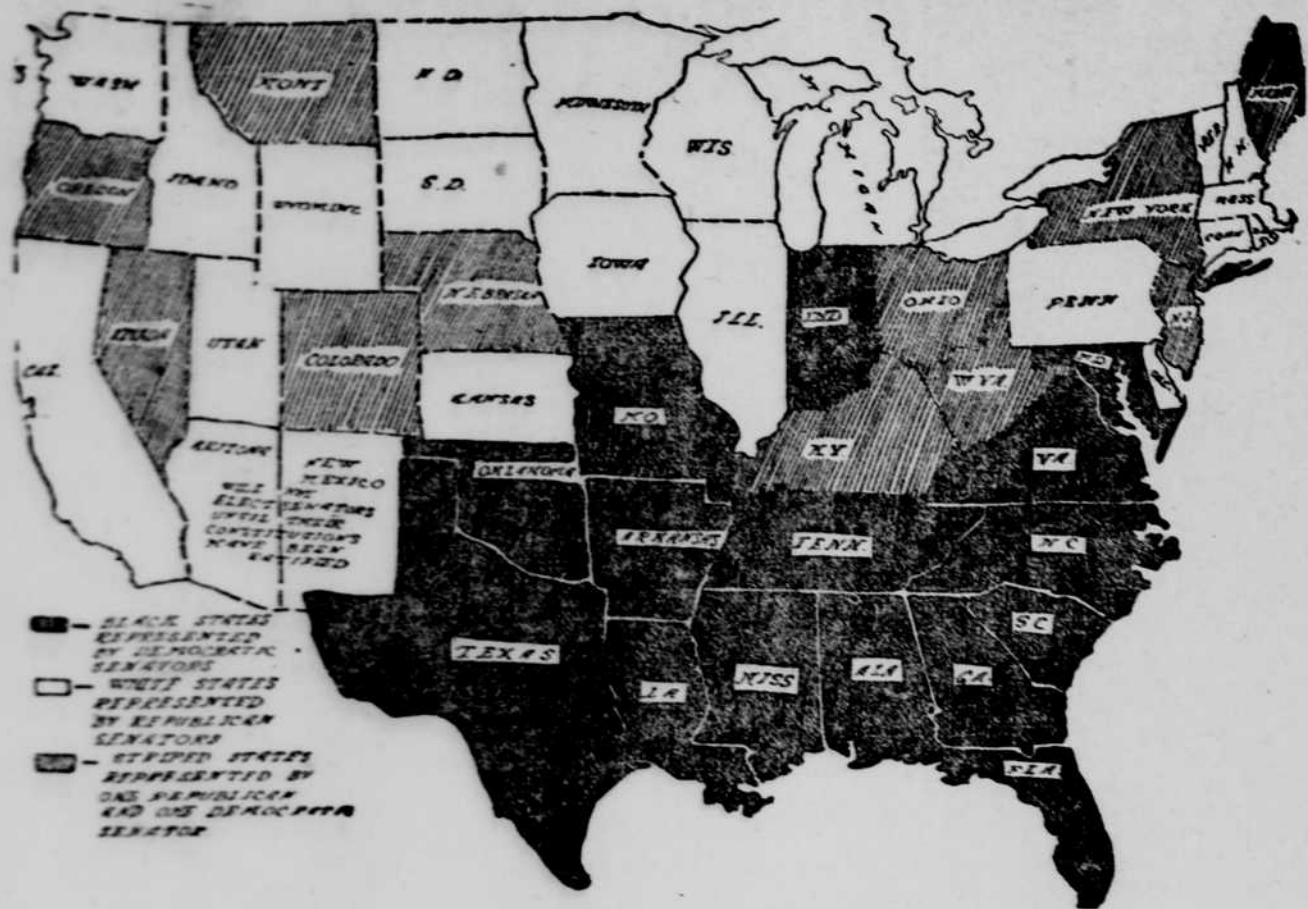


SENATORIAL MAP OF THE UNITED STATES



BETWEEN now and March the legislatures of the various states will be busy electing United States senators to complete the upper house of the sixty-second congress. Thirty-three senators are to be elected, and of these seventeen will be Republicans and sixteen Democrats, representing a gain of nine seats for the Democrats and one seat for the Republicans. The accompanying map shows how the states will be represented in the next Senate.

LATEST IN SURGERY

Lengthening of Bones and Mending of Veins.

Most interesting of Advanced Methods Applies to Stimulating of Osseous Growth Artificially by Injecting Formalin.

New York.—Limbs may be lengthened by stimulating the growth of the bones and cut arteries repaired with metal rings something in the manner adopted in joining water mains, according to methods of the new surgery described in the current medical journals.

One of the most interesting of the advanced methods applies to the stimulation of osseous growth artificially by injecting formalin. This is a solution of the gas formaldehyde used as a disinfectant and preservative, and the liquid has been employed not only in its pure state, but in the two per cent. solution.

The experiments which have been conducted so far by Dr. R. O. Meisenbach are described by him in the *Journal of Orthopedic Surgery*, and there is an editorial upon them in the *Medical Record* of this city. Doctor Meisenbach conducted his experiments on the legs of rabbits, selecting usually the right tibia and using the left as a control or means of comparing results.

He also availed himself of mechanical means, but the most satisfactory results were obtained with the formalin injections. It is said the introduction of the solution, which also has high antiseptic qualities, stimulates the secretion of lime from the fibrous tissue which covers the cartilage and thus builds up the bone.

If this method should be applied to human beings, it might be of great value, and the medical authorities think such an application of the discovery is far from remote.

It is held that the formalin stimulation may serve as a stepping stone to a new method of treatment in bone cases which have hitherto baffled the skill of surgeons. Bones which have broken compound fractures might thus be made to reunite, and limbs, which are abnormally shortened through the arrest of the growth of bone, as is so frequently the case in children after attacks of infantile paralysis, could be lengthened.

The discovery might extend even to the treatment of tuberculosis of the bones and to various diseases which affect the framework of the body. There are numerous cases where persons who have broken arms or legs are crippled permanently even with all the attention which skilled surgery can give, and were it possible to create new bones at the places where it is required many a limp would be avoided.

The modern surgeon, therefore, by taking thought may yet be able to add to the stature of man. The results have been very encouraging, according to the scientific reports, for some of the best of them were obtained by only one injection of the formalin.

Joining of the ends of a parted artery by the use of rings of the metal magnesium is described in the last number of the *Journal of the American Medical Association* by Drs. V. Lespinaux, G. Carl Fisher and J. Eisenstadt, in an article descriptive of their work in the department

of experimental surgery in the Northwestern university medical school. They acknowledge the assistance of Drs. Zeit, Wölfer, Violet, Deason and Solomon.

The vessel had been clamped at either side of the cut, and the ends sewed into holes in the magnesium rings. The tissue is secured firmly, and the two flat rings are fitted against each other and bound together by passing silk thread through the holes in the rings. This is only a general description, for there are variations of the success specified.

The rings thus fitting flush against each other and tightly bound together, form a union. The clamps are removed and the blood stream flows as ever through the accustomed channel. The metal of which the rings are made is only slightly acted upon at first by the fluids of the body and the salt. They are thoroughly sterilized before their introduction, either in distilled water or a spring or lake water which is only slightly saline.

For 30 days the rings hold their original shape and at the end of that period they begin to break down and in from 80 to 100 days they have been completely absorbed into the system.

Conclusions the surgeons reach is that the use of these rings makes the operation safe, certain and easy.

BIG COST AS DIVORCE CURE

Sir Edward Carson, Noted English Lawyer, Would Make Erring People Pay Dearly.

London.—Sir Edward Carson, K. C., who practiced in Ireland for many years before coming to England, and who was an expert witness before the divorce commission here the other day, expressed the belief that every obstacle should be thrown in the way of those who sought divorce to make it difficult to obtain decrees.

He said it would be a fatal mistake to make the obtaining of divorces easier. He believed a judge should exhaust every effort to induce those seeking divorces to settle their difficulties out of court and to become united.

When Sir Edward was told that working people had not the facilities of the wealthier to obtain divorces, he invariably replied that he would equalize matters if he could by cutting down the facilities of the wealthy.

In Sir Edward's opinion the damages given in divorce cases are as a rule entirely adequate. He thought it would be a salutary thing if the damages were much heavier. In the case of a man with £20,000 to £30,000 a year who coveted another man's wife and took her away from him the damages should not be £5,000 but £100,000. This certainly increases the worth of a wife.

When asked if he would not be in favor of leaving the matter of damages to the judge, Sir Edward replied that he thought judges were inclined to be even more parsimonious in such cases than juries.

In reply to a question from a member of the commission the lawyer said he would put the sexes on terms of equality and advanced the startling theory that a woman should not be able to divorce her husband for infidelity, because men, on account of the customs of the age, looked upon this matter in a different way from women.

and brings it well within the skill of the average surgeon. They declare that the operation is applicable in all wounds of the large vessels and that it is possible to remove a short piece of the injured blood vessel, bring the extremities together and then to re-establish circulation by making an end to end union in the simple mechanical manner they have employed.

TEACH MEALS AND MANNERS

Efforts Being Made to Train English Children on Table Etiquette—See Benefits.

London.—Efforts to train the poorer children of London to be "well-mannered and well-behaved" are being made by the London common council education committee in the course of the arrangements for feeding the necessary children.

The general appearance of the average necessities child has been improved, the report declares. Some children, however, remain ill-nourished, mainly through unsuitable food or lack of digestive power, or other causes, such as bad teeth, hurried meals, drinking strong tea, insufficient sleep and chronic fatigue and overwork.

Judge Finds Meanest Man. New York.—John Lloyd was characterized as "the meanest man in New York" by Magistrate Krotel the other day. Lloyd was accused by his wife of selling her only pair of shoes to buy a bucket of beer.

YOUNG SPINSTERS MAKE VOW

Six San Francisco Maidens, Fearing Divorce, Agree Never to Enter Matrimony.

San Francisco.—Society was surprised the other day by the announcement that six debutants of last season—Miss Agnes Tillman, Miss Dorothy Van Sicken, Miss Lillian Van Worst, Miss Anna Olney, Miss Marion Davis and Miss Josephine Johnson—had vowed with solemnity, ceremony and seeming sincerity that never would they consent to be shackled with the bonds of marriage.

In a season's whirl they say they have observed that glamor fades and romance passes away; that the prince in a sorry figure in a divorce court. The days of chivalry are no more, they sadly assert.

It was on the eve of her debut that one of the social favorites learned of the ways of the matrimonial mart. She chanced to read an attack on the marriage market of society. In which it was set forth that girls were presented like wares to be disposed of as soon as possible, at high figures at first, then at reduced rates that become lower each year until the premium of a dowry may be offered.

Alfonso Sends \$100 to Widow. Paris.—King Alfonso, learning of the death of a Paris policeman named Viel, who was wounded on the occasion of the anarchist outrage against the king in the Rue de Rohan, Paris, has sent a check for \$100 to the man's widow.

"Cold Feet" Saves His Job

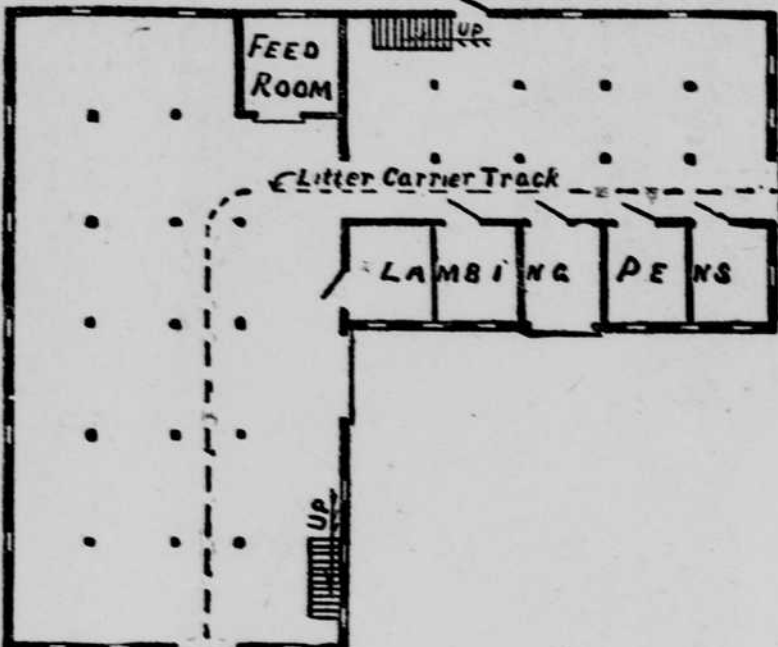
Practical Joker Foregoes Chance to Laugh When Boss Has Attack of Ill-Temper.

Chicago.—Because a practical joker had "cold feet," occupants of a certain South Side Elevated railroad car missed a good laugh recently, and a department chief in a large business concern went to his home, his composure untroubled and himself none the wiser.

This man had during the day purchased a shining new alarm clock, of which he was proud. He exhibited it to a few of his subordinates about the office and remarked how he liked it "capture that traditional worm. The alarm clock would enable him to get up early daily," he insisted.

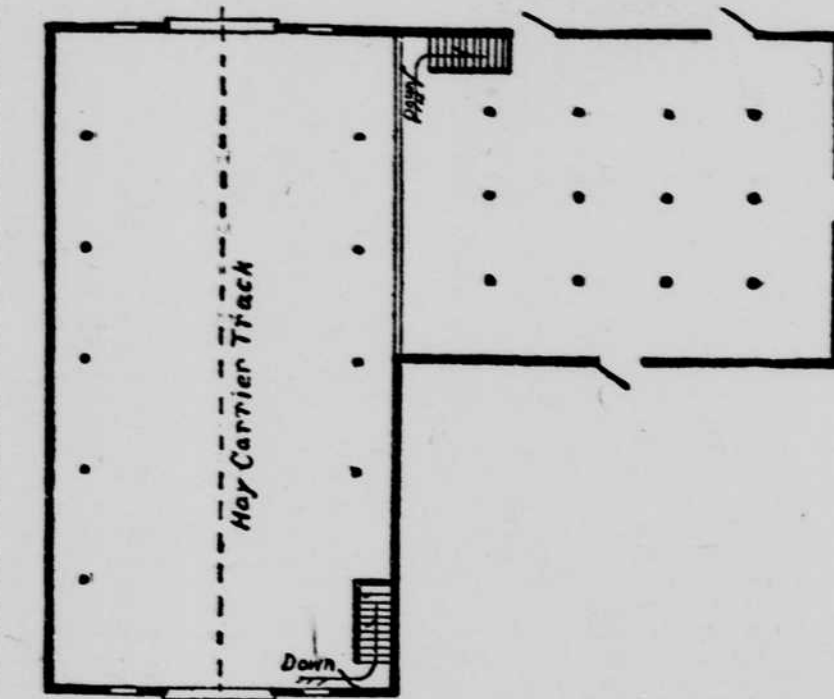
DIRECTIONS FOR ERECTING PRACTICAL SHEEP BUILDING

First Floor Arranged With Posts for Attaching Wire Fencing for Partitions—Lambing Pens Are in Warmest Part.



First Floor Plan.

The accompanying drawings, shown by Farm, Stock and Home, embody an excellent plan for a large sheep barn, which F. L. Marsh describes in detail as follows: Foundation and post footings are of stone or grout. The posts strongly support the upper floor, and furnish points of attachment for wire fencing partitions. The lambing pens are in the warmest part. The remaining space may have the dimensions changed as occasion requires. Feeding racks are movable, and may form part of the partitions. Part of the



Loft Plan.

space may be used for young stock, in pens. Windows are fitted with open sash, covered with two thicknesses of muslin. This will furnish ventilation, but may be supplemented by roof ventilators. In case there is not sufficient

WINTER CARE FOR ANIMALS

Sudden Change From Pasture to Grain and Hay Feed Has Often Been Cause of Sickness Among Stock.

(By R. R. RUSHING.) I find from experience that it is most profitable and will cause as little shrinkage as possible in the milk flow or loss of weight in the animals, interchanging from grass to grain and hay, that such changes should be gradual.

I think at least ten days or two weeks should be taken to shift the animals from their fall quarters of grass to winter quarters of grain and hay. I too often see animals out in the pasture until very late in the fall and receive very little attention if any, till some stormy time comes and then they are hustled into the barn and fed lots of feed which is pitched to them any way and usually the consequence is some sick, and perhaps dead stock. This is not profitable.

Very often during the season when the animals are to be changed the pasture is rather short and sometimes tough, while if the fall rains have been plentiful, the grass may be in fairly good condition but if the animals are allowed access to a rack full of good sweet hay they will begin eating the hay even while the pasture is quite good.

In this way the animals will become accustomed to the change gradually and there will be no danger when put on dry feed. I think one of the best feeds to be

light, some of the windows can be glazed, but usually doors will be open, using gates when necessary. The second story holds much more roughage than will feed the sheep. The barn is thus suited to the frequent conditions of plenty of stable room and lack of storage for roughage, or where part of the hay is sold. Also for storing roughage to be fed out of doors. The main part has gable doors and track for hay. The "ell" has several doors, and may have hay track. It is for oat hay in bundles, shredded or bundle fodder and straw. By using the

blower it is easily filled. Grain may be placed in second story, drawing it down to feed. Roof has prepared roofing; sides have the same in light weight over cheap boards, or it may have a drop siding.

Animals should be kept out of doors as much as possible and should be stabled only when the weather is bad. In fair weather never stable stock unless it is very cold as they like to be out in the open air and it is better for them than being shut up in the stables. But, when they are in the stables and the weather is not too severe so to it that the windows are open so as to have an abundance of ventilation.

In the early winter the animals will suffer more from close confinement than from too much ventilation.

When changing from grass to dry food allow the animals as much liberty as possible in the yards about the barn, only putting them in the barn at milking time and during the bad weather, until they become thoroughly accustomed to the new conditions.

Animals on pasture naturally take exercise. In grazing they will walk miles. The change from this condition to a narrow stall is rather severe and due consideration should be given in allowing them at this time as much freedom and open air while changing the feed as possible.

keep cool, and never make a quick motion with them.

Itching Skin. It is said that in case of itching skin the horse should be clipped and the grain ration cut down one-half. No corn should be fed. The animal will do best on oats, bran and hay. Green grass often leads to itchiness of the skin. After clipping apply to the itching parts, as required, a mixture of one dram each of diluted sulphuric acid and carbolic acid in a pint of water. A little menthol added is effective where itching is excessive. Wash the affected parts before first application of medicine is made. Should the trouble continue, give a tablespoonful twice daily of a mixture of equal parts of powdered wood charcoal and granulated hyposulphate of soda.

Cattle in Argentina. The Argentine Republic is a great cattle producing country. In 1909, no fewer than 130,000 head were exported. A great amount of frozen meat and chilled meat is shipped.

ANTIDOTE FOR STING OF BEE

First Lightly Brush Sting Away and Then Lay Slice of Onion Over Puncture—Ammonia Is Another Remedy.

(By BESSIE PUTNAM.) A looker-on, attacked by a mad bee, can usually escape by sliding among the branches of a tree or sinking down into the grass. The bee soon gets confused by the surrounding leaves and seems to lose trace of its game. If stung, lay a slice of onion over the puncture, first brushing the sting lightly away. Renew this every few minutes until pain ceases. Ammonia is another effective antidote. But neither of these should be used while working with the bees, as the odor enrages them still more.

Never pull the sting out, but brush it lightly away. It is a tiny poison tube, and if pressed, sends the contents deeper into the flesh. Above all, in handling bees, learn to

Fancy Feathers and Wings



THOSE who make up feathers into forms that are to decorate millinery, look with interest upon each wearer of plumage and each separate feather. Many thousands of persons spend their working hours sewing, pasting, wiring, branding and otherwise manipulating the plumage of birds (mostly domestic fowls) into new forms. Each feather is regarded with an eye to its possibilities in the evolution of something new by the manufacturers. Even the tiny feathers from the neck of the pigeon or peacock are handled separately, in making up the most expensive pieces. Just lately, large butterflies made of the wings with the tiny feathers have made us marvel at the work of the designers. You can imagine the sheen of the wings and the splendor of color. The bodies are of velvet and the antennae of wired chenille or gold cord.

In Fig. 1 a fancy feather piece is shown, in which the form is purely artificial, that is, not made to copy any particular natural object, but an arrangement of plumage from different sources into an ornamental piece. The designer must consider whether his work is to be worn at the front, back or sides of a hat. The piece shown is made for the front. Beautiful and wonderful color studies and

graceful lines are brought out in many of these decorations now almost universal. To use them effectively, where they are large or elaborate, one must choose a proper shape and color, and remember that the hat and other trimming stuffs are to be considered as a background for the feather. In the example shown the velvet shape and ribbon bows all in one color and shade, frame in the handsome piece mounted at the front.

A small feather piece is not used in this way. The other trimming selected for the hat, leads up to it, and the fancy feather is to be used as the finishing touch, simply part of a whole. But milliners, and therefore manufacturers, are regarding with ever increasing favor, those feather pieces that are almost if not quite a complete trimming in themselves.

Nearly all the wings worn on hats are "made" wings, which term distinguishes them from "natural" wings. They are made so cleverly that it is difficult to believe they are put together by the hand of man. A pair of such wings springing from a band of feathers, is shown in Fig. 2. The band and wings form a single piece for which the velvet-draped turban makes an effective background. Such feather pieces make the work of the home milliner easy.

JULIA BOTTOMLEY.

PRETTY DRESS FOR A GIRL

Simple Model That Calls for Either Serge, Fine Cloth or Cashmere.

Serge, fine cloth or cashmere might be used for our simple model, which is made with a panel front laid on sides in a wrapped seam, and trimmed with buttons sewn on in sets of three. One tuck is made on each shoulder.

White or Cream Colored Voile, Embroidered Heavily, Approved Thing in Lingerie Dress.

The very latest news from Paris tells us that white or cream-colored voile, embroidered heavily, will be the approved thing in lingerie dresses for early spring. That seems to be looking a good way ahead, but if you do your own embroidery you will want this time to get ready in.

Really the possibilities are endless and fascinating. Either heavy embroidery (wallachian, for instance) will be used, or beadwork with rubber beads, or a combination of the two. Can't you just see a wall-of-roy design, worked solid in white and outlined beads? Or, perhaps, the beads would be black, and a black hat would be worn with the dress, or Alice blue, or old rose, or some other becoming and striking shade.

How pretty this would be in a three-piece suit, with the embroidery consisting of a skirtband, side plaits on the waist and collars and revers on the coat! Then there are other ideas—a Persian design worked out in vari-colored beads, for instance, or a spray of heavy flowers, morning-glories or passion flowers, with centers and veins accentuated by means of beads in the proper colors. In this case, the embroidery itself would be equally attractive in life colors or in white, or even in black.

Then there are all the metal effects. How lovely bronze would be on cream voile, or silver on pure white! Voile has the advantage of raveling easily, and so it would be quite possible to draw a thread all the way along the materials and work from that. Even drawnwork could be combined with these other effects.

Doesn't it make you want to start right away? Do have a dress like this for next season. I'm going to!

NEW DRESS TIP FROM PARIS

White or Cream Colored Voile, Embroidered Heavily, Approved Thing in Lingerie Dress.

Really the possibilities are endless and fascinating. Either heavy embroidery (wallachian, for instance) will be used, or beadwork with rubber beads, or a combination of the two. Can't you just see a wall-of-roy design, worked solid in white and outlined beads? Or, perhaps, the beads would be black, and a black hat would be worn with the dress, or Alice blue, or old rose, or some other becoming and striking shade.

How pretty this would be in a three-piece suit, with the embroidery consisting of a skirtband, side plaits on the waist and collars and revers on the coat! Then there are other ideas—a Persian design worked out in vari-colored beads, for instance, or a spray of heavy flowers, morning-glories or passion flowers, with centers and veins accentuated by means of beads in the proper colors. In this case, the embroidery itself would be equally attractive in life colors or in white, or even in black.

Then there are all the metal effects. How lovely bronze would be on cream voile, or silver on pure white! Voile has the advantage of raveling easily, and so it would be quite possible to draw a thread all the way along the materials and work from that. Even drawnwork could be combined with these other effects.

Doesn't it make you want to start right away? Do have a dress like this for next season. I'm going to!

Velvet Bags. When you gather up the scraps of your velvet afternoon dress, don't throw them away. Make them up into a soft bag that should be carried with the dress. It can be square or round, and whatever other material you wish can be combined with it. A long silk cord, or silver or gold if you wish the metallic note, must be attached. This is thrown over the arm.

Beads, embroidery, little patches of tapestry or brocades and braid or lace, are easy ways of decorating the flat upper surface.

Just as a personal touch, embroider your monogram in a circle or diamond down in one corner.

A Square Train New. The latest curiosity in feminine attire is the square train, a geometrical arrangement which has a strange appearance. To make it slightly more grotesque there is a striped mass of trimming upon it. Its origin is a continuation of the long back panel. It has a certain vogue already, but only on evening gowns. Dressmakers have not ventured to introduce it on house or street frocks. The fact that Queen Mary approves of the square train and has had it on several of her mourning dresses will give it prestige in England that its mere appearance could not obtain for it. English women have learned to cling to the short skirt and would have resented the square train except for royal approval.

Tapestry-covered Hats. Tapestry in bold patterns of soft, and old tints on a light ground stretched tightly over the frame, come in wide picture shapes and close mushroom models. They are untrimmied.