

## Distinctive Hat



Large Hat of Brown Satin, Lined with White Ottoman Silk, Crown Head and with Brown Marabout. "Fantasia" Formed of a Phazania's Tail, Head and Wings.

DECORATIONS FOR THE TABLE. CAMPHOR AS A FAMILY FRIEND. Numerous Design Shown in Silver. Valuable Medicine, and Useful in Cut Glass and Brass. Many Other Ways.

Candlesticks for the table may be of silver or glass. Hebridean glass, of brass, tier, again, the simpler designs are the more graceful. There are some very beautiful shades in the Hebridean and cut glass. "Chaper" will very good in silver, some in glass.

Shades made of cut glass or silver over linings of different colors are very pretty and also very frequent. Since the color can be changed so easily. The silk shades made of imitation rose petals come in all colors, and are not expensive. These with the head fringe are very pretty, but are not to be used with the candle with their apt to bend the candle. Hand painted shades are sometimes extremely attractive, but frequently not in good taste. The empire shape are at present highest in favor, but certainly are not as graceful as the more delicate Empire—Harper's Bazar.

**Belt Pins and Sashes.**  
In 1912 have taken the place of the buckle, for they are more easily adjusted. The same chains of beads are replaced now by the ribbon bands, delicate slender ties of satin or ribbon knotted and tied with beads of good value or semi-precious stones in the form of tassels, some of them have tiny buckles as well, and often they match in color and method of tying and making the sashes, which are another novelty of the season's styles.

Traffic sashes in tan are heavy with gold and silver tassels, are narrow, looped and twisted, with a tendency to come from unexpected nooks of the gown, and with the flimsy slender sashes give the delicate effect of femininity that is desirable this year. The tassels may be white with the tail-sash suit and relieve the stiffness of the sash.

**New Colors.**  
The new colors are **Dark Blue**. Many are of the leading style of the new wear. Lavender and shade of the new shades of blue are generally combined, but this is not the only thing. Ask any Parisian, the favorite color and she will tell you it is **dark blue** and **dark blue** and **dark blue**.

There are many shades of blue worn, the imperial, a rather old shade being especially liked. Russian blue and paper blue are other things in favor. **Wistaria** is another of the new names for an old color, and each shade of rubber color, a kind of grayish mauve, is much worn in every three-cos, hats, shoes, even in evening gowns, the trimmings relieving the somberness.

**How to Keep Violets.**  
I always keep my violets for five days. I wear them all day and when I come into the house I sprinkle them with very cold water, and allow the water to run directly upon the stems of the flowers. Then I saturate the paper with cold water and wind this around the stems and place a piece of oiled paper, well sprinkled, over the top of the violet and place them back in the box. I generally keep the violets on the sill outside of my window. —Harper's Bazar.

**The Blashed Coat.**  
The slight at each side of the coat is now necessary for walking. The new coats are so narrow at the hem that if they were left without an opening American women would have to learn the queer "bow, sidestep" called "walking" in Paris.

**Dusky Blue.**  
The new color that is a good deal talked about with the designers is known as **dusky blue**. It comes in mouseline, in snede, in cloth and in plush. It is possibly the most popular of the infinite variety of dyed cloths this year than the announcement that the shops can sell 300 yards in one cloth alone.

## CHIC TAILORED SUIT.



The tailor-made suit, as usual, will be a salient part of midday's winter wardrobe and simple, perfect lines is the special feature. The illustration is a good example of a smart costume in navy blue cloth, simply trimmed with a wide black outcath braid around the neck and tops of the turned-back cuffs. Narrow braid is used on the tiny little inset vest and body of coat. The skirt is close-fitting, following the lines of the figure, and is one of the most satisfactory models put forth this season.

**A Popular Hat.**  
A rational hat that is finding favor among women who take a middle ground in the styles is covered with velvet draped with silk and trimmed rather far back with baryard-plumage and one fluffy gray white egrette that softens the mass. These hats come in one-color schemes such as myrtle green, chestnut brown, faded violet and black.

## THE POTATO AND ITS NEED OF FERTILIZATION

Elements Which Soil Lacks Must Be Supplied to Produce Normal Tubers.—By Edward M. East, Illinois Agricultural College.

The writer was led first by Coudon's and Bousard's work to believe that the physical structure of the potato held some relation to the table quality. Microscopical examination of the structure of the potato bears out the

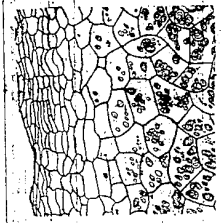


Fig. 1.—Outer Section of Cortical Layer.

chemical analyses of the different zones.

The cortical layer is the outside ring, the internal medullary layer is the branched structure and the external medullary layer is the part between.

The cortical layer, Figs. 1 and 2, below the first few layers of cells which are removed with the skin, shows a remarkably larger amount of starch in the cells, than does the internal medullary layer (Figs. 3 and 4). The starch content of the internal medullary layer is also greater than that of the internal. The grains of starch in the cortical and external medullary layers besides existing in greater numbers per cell, are generally

duced with the use of potassium chloride but this conclusion is opposed by other experiments. There is probably no ill effect from the use of ordinary amounts (100 to 500 pounds) of potassium chloride, even if excessive use of chlorine is detrimental.

The accompanying table shows the general effect of fertilizers upon quality. In an experiment planned primarily in soil, fertility, sodium nitrate was sown at the rate of 250 pounds to the acre over the whole plot and potassium and phosphorus supplied as shown in the table. The numbers here shown are the estimates of quality of all of the tubers produced by all of the plots of one row running across all the plots. The variety used was Green Mountain.

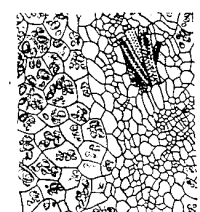


Fig. 3.—Section Near the Vascular Bundles Showing Portion of External Medullary Layer.

The land was very poor in fertility, although in excellent physical condition for growing potatoes. It was

Plot No.	Fertilizers applied per acre.	No. of tubers produced	No. of tubers of each of these qualities.				
			Good.	Fair.	Med.	Poor.	Very poor.
1	Nothing.	81	0	5	17	25	34
2	[Potassium] 150 lbs. [Bone meal] 200 lbs.	125	1	10	33	56	25
3	[Potassium] 300 lbs. [Bone meal] 100 lbs.	121	1	12	42	40	26
4	[Potassium] 300 lbs. [Bone meal] 200 lbs.	148	3	14	56	45	30
5	[Potassium] 400 lbs. [Bone meal] 400 lbs.	135	3	19	56	37	20

Table Showing Influence of Fertilizers on Quality.

erally of larger average size. The quantity of starch in the internal medullary layer causes the cells to be only partially filled with the cooked starch and the cell walls are scarcely over-impregnated. In the cortical layer, on the other hand, the amount of starch is such that in the swelling due to cooking, the cells are filled completely and many of them ruptured, making the fleshy appearance so much evident of the condition.

It is quite evident that that potato having as far as possible the highest percentage of starch and containing as large an amount as possible of cortical and external medullary layers in proportion to the internal medullary layer should be of the finest quality.

This has been shown to be a fact in experiments with 15 American varieties even though cooked after having been split in half, which is manifestly a disadvantage.

The influence of fertilizers on the potato seems to be primarily if not solely due to their aid in producing a normal development of tubers. That is,

known, however, that it was not nearly so deficient in phosphorus as in potassium. As is seen, the quality grew markedly better where the potassium chloride was supplied at the rate of 250 pounds per acre, but ap-

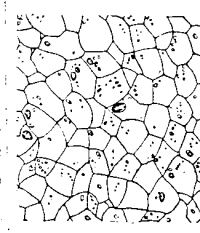


Fig. 4.—Section of Internal Medullary Layer.

parently very little difference was made by doubling the applications of phosphorus.

**Alyse Clover.**—Alyse clover can be grown on land that is too wet for the growing of red clover. It is one of great value in many parts of the United States in which the drainage of land is in a very backward condition, and is likely to be backward for a long time to come. We commend this clover for trial in all such locations. Where it is difficult to grow any kind of a legume, the land generally needs a crop such as alyse clover to put the soil in good condition, or as good as can be hoped for on undrained land. The hay from alyse clover is finer than from red clover and not so much is produced per acre, but it is richer in nitrogen, which is a very important consideration.

**Separate Hopper for Different Grains.**—One of the greatest objections to the hopper system of feeding is that the hens must either use the mixture you give them, whether they want it or not, or else they will waste some kind of white sticking for what they like. To overcome this, use several hoppers, each with one kind of grain in it. This gives the hen a chance to balance her own ration.

## CONSTITUTIONAL OBJECTION.



Mrs. Thelma—Well, if you're thirsty I'll give you a glass of water to drink. Weary Willy—I dare not touch water, mum. I've got an iron constitution and it must hurt it.

**Bessie's Task.**

"Mamma," said little Bessie, at table one noon, "I'm to write something to read at school next Friday, but I've forgotten what the teacher called it."

"An essay, perhaps," suggested Bessie's father.

"An oration," offered the little maid's high-school brother, standing by a valdettory, prompted a senior sister.

"No," said Bessie, suddenly brightening. "I remember now what it is—it's an imposition."

**She Spoke Too Quick.**

Mr. Crimmonbeak—I see by this paper that women are barred from the island of Fermand de Norouba, belonging to B.

Mrs. Crimmonbeak—That's like the selfish men! Don't want the women to have any privileges!

"I forgot to say, dear, that the island is only used for convicts!"

**The Mistral.**

The mistral is a cold northwest wind which does much damage at certain seasons in France and Italy. From the close of autumn to the beginning of spring, it is especially violent. It dries up the soil and causes dangerous storms on the Mediterranean sea.

**A Natural Cause.**

"I think," said the smart child, respectfully, "the language must be the most human-like of all the nations."

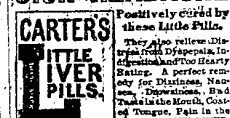
"Why so, my child?" asked the fond papa.

"Because," the smart child answered, "it is governed by its diet."

**ONLY ONE "BROMO QUININE"**  
That is **W. D. GILKINSON'S**. Look for the signature of W. D. GILKINSON. Clear the World over for **ONE** and **ONE** only.

Give some people their pick and they'll pick it as every time.

## SICK HEADACHE



**CARTER'S LITTLE LIVER PILLS.** Positively cured by these Little Pills. They also relieve every other liver complaint. For Biliousness, Indigestion, and Too Heavy Eating. A perfect remedy for Constipation, Nausea, Depression, Headache, and all the ailments of the liver. **W. L. DOUGLAS'S** 300 SHOES \$3.50

They regulate the bowels. Truly Vegetable. **SMALL PILL. SMALL DOSE. SMALL PRICE.**

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