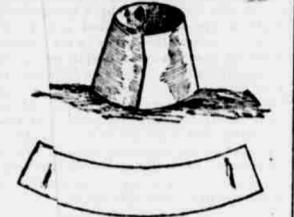


**FARM AND GARDEN.**

**DESIRABLE VARIETIES OF CELERY FOR MANY SECTIONS.**

Among the Bees—Important Points About Fruits and Trees—A Simple and Inexpensive Plant Protector—The Use of Insecticides.

In many sections of the country it is not possible to grow cucumbers and other plants without the protection of frames or bottomless boxes of some kind, that protect the young plant from their insect enemies. These contrivances are often expensive and troublesome to adjust. The illustration represents a device suggested for by The American Agriculturist as an effective plant protector, easy to make and apply, and costing only the labor of constructing it.



PLANT PROTECTOR.

This inexpensive protector consists simply of a piece of card board or stiff paper of any kind, cut as seen in Fig. 2 in the illustration. When the ends are brought together and the slits, indicated in the illustration, made to interlock a cone, as seen in Fig. 1, is produced, which, when placed about the plant, furnishes as complete a protection against insects as the most expensive device.

**Newly Set Trees.**

Newly set trees require special care at this season, and many trees will doubtless die of neglect that with proper attention might thrive. Hot, dry weather kills many young trees. The ground around newly set trees ought to be frequently stirred and not allowed to become hard. If trees were not mulched at time of planting stir the soil and apply as a mulch some substance that will soak up and retain moisture. It does no good to water trees that are not mulched in dry weather. A mulch serves a double purpose: it retains moisture in the ground below it, and holds moisture in itself to be given up as the soil beneath it dries.

**Transplanting Celery.**

Select if possible the first day after a heavy rain for transplanting celery, when the ground is cool and moist. Set the plants about the same level, with the ground around them, as they grew before transplanting. Remember, if set too high the plants will wilt; if set too low they will be smothered. Press the earth firmly around the plants at time of transplanting. Celery plants may be set between rows of early vegetables, such as onions, cabbage, and the like, when ground is limited. A usual plan is to set the plants in rows about three feet apart, the plants being six inches distant in the rows.



WHITE SOLID CELERY.

Numbered with leading varieties popular in many sections, and notably in the great celery districts about Kalamazoo, Mich., is "Golden Dwarf." In size and habit of growth it is much the same as the half dwarf and dwarf kinds, except that when blanched the heart is of a waxy golden yellow. It is, during winter, one of the best keepers known.

"Boston Market" is a favorite around Boston; and is similar to the dwarf white varieties, but rather more robust. "Giant White Solid" is one of the best of the large growing sorts, and is prized in southern sections especially, because it will thrive in a dry, hot atmosphere. "White Plume," a comparatively new variety, has found favor among amateur



HENDERSON'S WHITE PLUME.

growers because its stalks and leaves are naturally white, and do not require blanching by the old processes of high banking. By simply tying up the stalks and drawing up the soil with a hoe the work of blanching is complete.

**How to Apply Insect Poison.**  
The bureau of entomology, department of agriculture at Washington, D. C., sends out the following for use as insecticides on or about plants, trees, etc.:  
London Purple.—To twenty pounds

**SCIENCE AND PROGRESS.**

**A REMARKABLE ILLUSION ILLUSTRATED AND EXPLAINED.**

Something About the Time and Manner of the Wearing Out of Iron Rails—How One of the Most Peculiar and Expensive Perferences is Obtained.

The personal appearance of the civet is not prepossessing, as will be seen from the illustration, but this animal yields a precious substance, one of the most peculiar and expensive perfumes in existence. This perfume is not only in great favor with Oriental women, but about 700 pounds of civet is used annually in the United States in the manufacture of perfumes. Like musk, it possesses lasting qualities, and when added in a minute quantity will augment the odor of other perfumes. Civet is a concrete mass, semi-fluid, with the consistency of honey. When taken from the animal it is of a yellow brown color, but by exposure turns to a dark brown.



THE CIVET.

This odoriferous fluid is secreted in a cavity or poc etc. It is extracted from the animal once a week, while it is firmly attached to a cage by means of strong chains. A small spoon is introduced into the pocket and the precious perfume is withdrawn with care. Hundreds of these animals are kept in captivity on the outskirts of Abyssinia and supply the world with civet.

There are, says Science News, from which the above was taken, two distinct varieties of the wonderful beast. The Viverra civetta, or true civet, is peculiar to Abyssinia and the southern division of Africa, where it is vulgarly known by the name of muk cat. It may be distinguished by its projecting teeth, small and piercing eyes and short, rounded ears. The hair is long and thin, the color varying from a grayish black to light gray darker on the back, where it forms an erectile mane. Its flattened sides are marked with black, irregular stripes. It is a bloodthirsty animal, and is an object of fear and abhorrence in this region, although it rarely moves abroad during the day, but passes the hours of light and heat in squalid stables, hidden from prying eyes. The Viverra zibetha of India and the Philippine islands differs in no essential particulars save its short and thick hair and a much longer neck; the description of one may serve for that, with this single variation. In many ways the civet resembles both the jaguar and the cat, the latter especially in disposition and size.

**Delicate Photography.**

German photographers have succeeded in photographing a projectile in the course of its flight, and some of the photographs show the head of condensed air which precedes every shot. It is this "head," explains Popular Science News, which prevents even skillful riflemen from hitting an empty egg shell when hung on a long thread. The air blows the shell out of the way of the bullet.

**Liquid at Low Temperature.**

Quicksilver is the metal mercury in a melted state. It thaws at 38.8 degs below zero, or, below that point, hardens. Under and above a temperature of 39 degs. below zero there is the same relation between hard and melted mercury as there is between ice and water under and above a temperature of 32 degs. above, or potassium at 55 degs., or tin at 228 degs.

**To Harden Tools.**

A. E. Tucker claims, in a trade journal, that he has successfully edged grooving tools for chilled rolls by dipping the actual cutting portion in mercury. No more of the steel than is actually necessary should be dipped, as, while imparting extreme hardness, it naturally makes the body of the tool extremely brittle.

**The Land Never Rests.**

Recent scientific experiments make it appear, says a writer on earthquakes, that the surface of the land is never absolutely at rest for more than thirty hours at a time. Thus those great earthquakes which make epochs in history are merely extreme manifestations of forces that rarely sleep.

**When Rails Wear Out.**

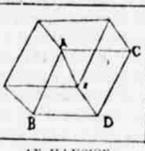
It is a well known fact among railroad men that on railroads running north and south the west rails wear out the faster; that five rails will wear out on the west side of the track while three are doing service on the east side.

**Why Teeth Vary in Hardness.**

The teeth of an individual often vary greatly in hardness at intervals, and a Berlin physician, W. D. Miller, is experimenting to show that this is due to a varying proportion of lime salts in the food.

**An Optical Illusion.**

In a lecture before the Franklin institute, Mr. Charles F. Hines exhibited a diagram which presents a remarkable illusion.



If one looks at the rectangular solid represented in perspective in the cut, the face ABCD will usually appear nearest to him and X farthest away; but by looking a little more closely a slight effect of the will cause this appearance to be reversed, and ABCD will be the back face, while X comes to the front, the apparent position of the solid changing at the same time. A little practice will enable one to cause it to change sides at will; and a peculiar sensation is experienced as the figure apparently changes its position, as if endowed with life.

It is rather difficult, says Science News, to briefly explain this illusion, which depends upon the laws of perspective. When the face ABCD appears to be in front, the block appears to be resting in a natural position, and consequently the eye at first sees it that way; but when the sides are reversed the block seems to be tipped backward against the action of gravity, and an effort of the will is needed to make it assume that position, although the lines of perspective indicate both positions equally well. In order to prevent this confusion in drawings of crystals, etc., the back lines are usually drawn dotted or broken, to indicate their position.

**Popular Summer Dresses.**

Foulards and India silks are among the most popular and at the same time comfortable dresses for summer wear. The red foulards and China silks, so popular with French women, are also worn here. Velvet is much used as a trimming for these soft silk dresses; the velvet being employed for collar, cuffs, vest and plastron.

**Announcement Extraordinary.**

After many years of hard work, old SANTA CLAUS feels compelled to add to his former business of supplying CHRISTMAS GIFTS to make the little ones happy. He finds that people don't keep their chimneys clean as they did in older times, and what with the Soot, Dirt and Smoke he constantly meets in his frequent excursions up and down the chimneys, he has become as dirty and grimy as a chimney sweep. This affects his health as well as his looks. He has therefore embarked in the SOAP business. From long years of observation in millions of homes, he knows that few of the Soaps in use are satisfactory, so he has invented a NEW SOAP which beats anything yet seen. He brands it with his own name, viz. **SANTA CLAUS** and has it made by Messrs. N. K. FAIRBANK & CO. the Great SOAP-MAKERS of the West. Hereafter he will present a cleaner appearance, and instead of making his visits but once a year, he will come every WASH DAY, and leave something as pleasing to grown folks as his Christmas gifts were to the Children. **SANTA CLAUS stipulates that everything must be cleaned and washed with HIS soap.** N. K. FAIRBANK & CO. MANUFACTURERS, CHICAGO.



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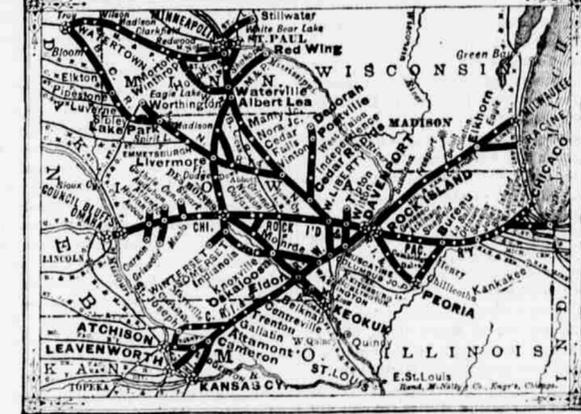
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