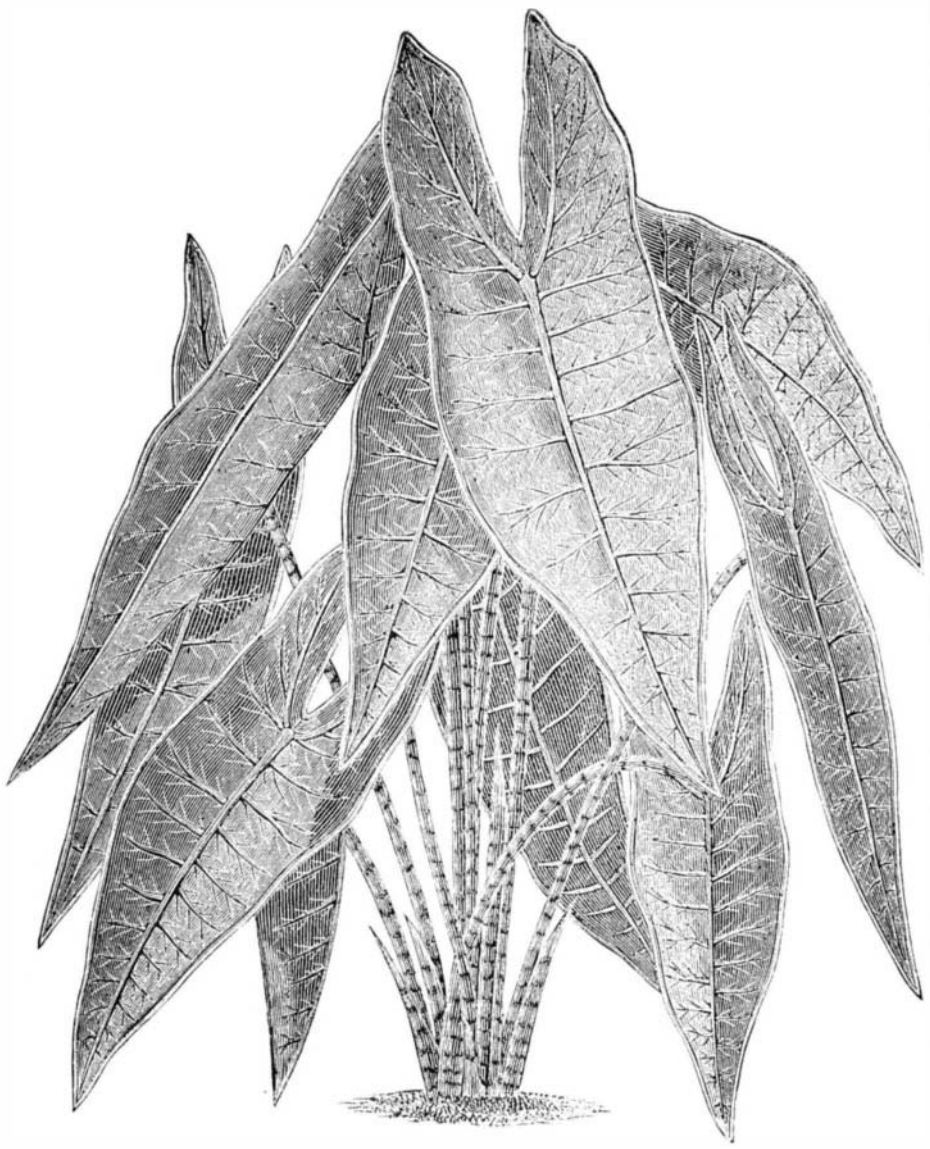
THE ALOCASIAS.

This tribe of plants (belonging to the species known as arads) is now receiving much attention from the admirers of handsome foliage. The variety, *a. intermedia*, shown in our engraving, is a singularly bold specimen, of which some of the more noticeable peculiarities are the size and configuration of the leaf and the mottled cuticle to the stalks. The curled edge of the leaf is an additional distinction, and the venous system shows a high degree of organization. Like its congeners, this plant is propagated by dividing its fleshy rhizomes; and being of vigorous habit, it soon makes a good specimen if potted carefully in a fresh open compost, consisting of fibrous peat, turfy loam, and leaf mold, with sufficient coarse sandstone grit to keep the whole open and porous.

It is worth notice that few arads like a close soil; on the contrary, a rich, free, vegetable mold is what they enjoy. If the thick roots of an alocasia or anthurium be examined, the tips will be found covered with short hair-like processes, which are vigorous and healthy wherever the soil is open, but which soon decay in a wet, stagnant compost. They seem to be of use in absorbing moisture from the air spaces between the nodules of peat and turf rather than from the compost itself; and if a covering of fresh living sphagnum be placed over the tops of the pots, near the root stocks, fresh roots soon make their appearance there, a circumstance which adds considerably to the health of the plants. It is a singular fact that the roots of nearly all the endogenous plants like to grow in living sphagnum moss, a material which may with advantage be added to the compost used for nearly all arads.



ALOCASIA INTERMEDIA.

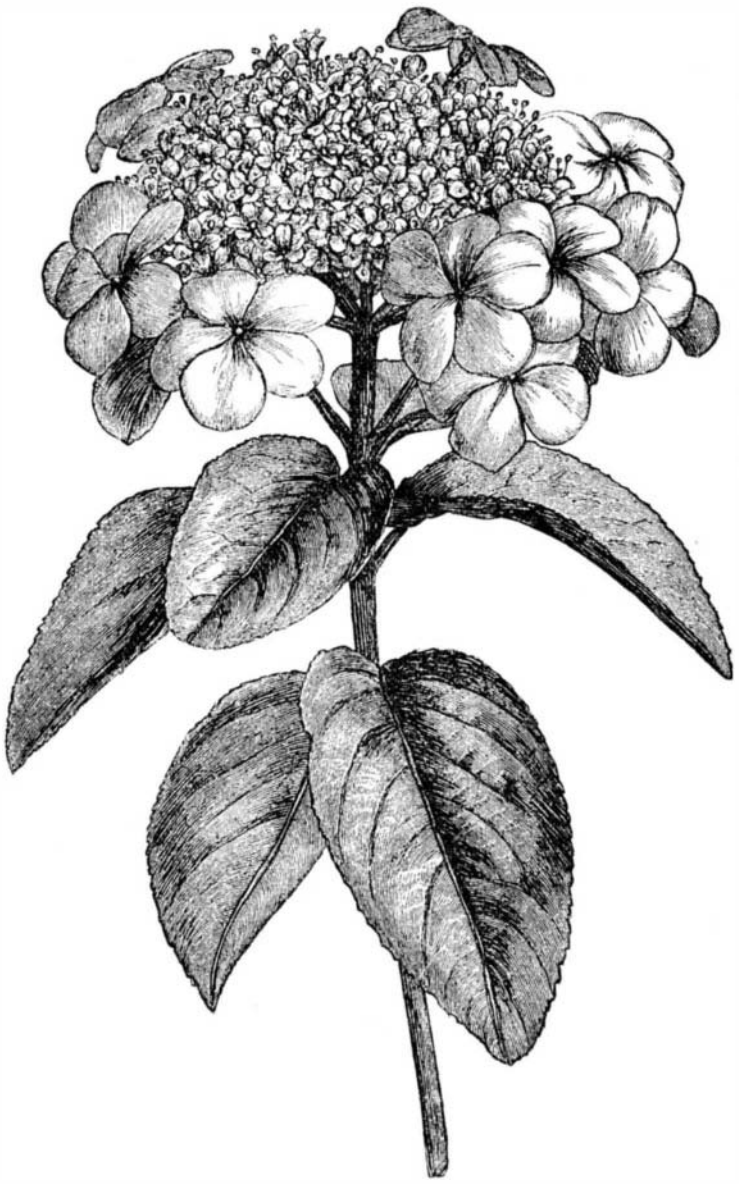
The Demagnetization of Watches.

Watches worn by students and others in technical laboratories are often rendered useless by being magnetized by the magnets used in such places. Magnets kept in the house often create equal mischief by being laid near watches, and much time and expense are sometimes needed to demagnetize them before they can be made to work. A serious case of this kind of injury recently led Professor A. M. Mayer, of the Stevens Institute of Technology, Hoboken, to experiments which resulted in a very simple method of demagnetization. The magnetized watch was laid upon a table in the neighborhood of a common compass needle. Each hour on the face was then placed in turn before it to discover the location and intensity of the magnetism in the watch. The movement of the compass showed the north and south pole to be located, say, at the figures V and XI, while the neutral points were at VIII and II. The watch was then held in a horizontal position before a large bar magnet, the two south poles being together. A gentle tilting motion was given to it for a moment; and on trying the watch again before the compass, a sensible decrease of magnetism was observed. The process was repeated till the sensitiveness of the watch at that pole was nearly extinguished, when the same thing was tried with the north pole of the watch. After a few trials and comparisons, the magnetic influence was found to be removed, and the watch readily resumed its work.—*Scribner's Monthly.*

THE GUELDER ROSE.

The guelder rose (*viburnum*), or, as we call it, snowball, is one of the most ornamental flowering shrubs which adorn our gardens. The pure whiteness of the blossom, the globular form which each mass of flowers assumes, and the profuseness with which the tree adorns itself in the spring make it a universal favorite where shrubs of variously colored blooms are massed together, to make an effective picture as a whole, as well as by exhibiting variety and contrast of colors. The guelder rose was originally a native of China, and has been varied by cultivation till many species are known, the familiar kind bearing the botanical name of *viburnum macrocephalum*. It yields seeds freely, and can be propagated with some difficulty by cuttings, which should be of young wood and placed in a moist soil under glass. Grafting, however, is the best method, and is the one adopted in China, which, as we have stated, is the native land of the tree.

M. Keteleer, a French floriculturist, has recently introduced a new variety, to which has been given the name of *v. Keteleeri*, but which (says the English *Garden*, from which we select the engraving) should be more properly called the *v. Keteleeri macrocephalum*. In France it grew well in the open air, a cutting being planted by M. Keteleer; and when one year old, it produced a dozen clusters of flowers. It can therefore be more readily propagated in this way than the common guelder rose; and it is sufficiently hardy to flourish out of doors, although it needs some protection in severe weather. Its favorite soil is one that is dry and warm, and of a calcareous nature. M. Keteleer recently contributed a description of the new variety to *La Revue Horticole*, the most popular magazine of botany and floriculture published in France.



THE GUELDER ROSE.

Window Plants.

Professor Maynard says, in the *Scientific Farmer*: Comparatively few persons who cultivate window plants are more than partially successful in their efforts. Among the reasons for this want of success may be given, first, a want of knowledge of the conditions of plant growth; second, a want of time to care for them properly; third, lack of the proper temperature and a pure moist atmosphere. First, very few persons realize that plants may be injured by too much or too little water, and fail to understand when the soil is too wet or too dry. Plants, as well as animals, must have pure air for a healthy growth. Those persons who are successful in growing plants have an intense love for their pets, and soon learn to detect anything wrong in their condition, and apply the remedy. Second, plants require constant care. Their condition must be watched closely and the soil not be allowed to get too dry, nor be watered too much. Their condition must be known at all times; and if a green fly appears it must be destroyed at once by crushing, or by dipping in tobacco water about the color of strong tea, or in strong soapsuds, rinsing the plant carefully fifteen or twenty minutes after dipping. If the red spiders are found, destroy them by sponging the under side of the leaves with cold soapsuds. Their presence is an indication that the atmosphereis too dry. If mealy bugs appear, they should be destroyed by touching with alcohol, or by brushing off with a dry, soft brush. If mildew attacks the roses or verbenas, it must be destroyed by washing or dipping in a solution of lime and sulphur, made by boiling one pound of caustic lime with one pound of sulphur in two gallons of water. This should be allowed to settle, and then kept in bottles ready for use. In using it, take one teaspoonful to one quart of water. One treatment in any of these cases may not be sufficient, and must be repeated as often as necessary. Eternal vigilance is the only price of success. Third, according to the temperature required for the healthy growth of different plants, they may be divided into two classes, namely: Those that grow well at an average temperature of 50° Fah., that is, ranging from 40° to 60°, and those that require a higher temperature, an average of 60°, ranging from 50° to 70°.

The first class will include geraniums, carnations, centaureas, camellias, azaleas, abutilons, ageratums, callas, sweet alussum, English ivies, smilax, mignonette, hyacinths, primulas, stevias, petunias, verbenas, lobelias, and roses. In the second class are begonias, bouvardias, epiphyllums, and all cacti, fuchsias, gloxinias, German ivies, heliotrope, zorrenias, pileas, and roses. Roses are included in both lists, as they will succeed under both conditions.

Plants grow much better where the temperature runs lower at night than during the day. It never should go below 40° Fah. in the first case, or below 50° in the second case. If plants stand near a window, a screen should be made by pasting papers to a frame, similar to that used for mosquito screens, placing it between the plants and the window every night. A screen made in this way can be inserted in a moment, and may consist of several thicknesses of paper.

A moist atmosphere is indispensable to the healthy growth of plants, and is obtained by keeping the pan in the furnace filled with water, or an urn or some other vessel upon the stove. The atmosphere must be free from sulphurous gases, and to accomplish this end the back damper in the stove must be kept open enough to allow its escape, and the windows raised a little every day for a short time when the temperature outside will allow.

If small plants, taken from the greenhouse, be carefully potted in suitable soil, placed in a room with a somewhat moist atmosphere, free from poisonous gases, carefully watered, exposed to the sunlight a part of the day, no insects allowed upon them, and the temperature kept as directed, they will grow and well repay the labor of caring for them, and homes be made brighter and happier by the presence of an abundance of flowers.

The Use of Fallen Leaves.

In the *Gardener's Monthly*, Mr. Meehan says: These have to be gathered up. They are excellent to mix with hot-bed material, and, where practicable, should be saved for this purpose. They do not heat so rapidly as stable manure, and in this have an advantage; as tempering the violence makes manure last longer and maintain a more regular heat. They are excellent material to put round cold frames to protect half-hardy plants. A board is put up to the hight of the frame boards, and about a foot or more from them, and the leaves filled in between. If the plants are somewhat tender, the bottom of the frames may be filled in a few feet with the leaves. These leaves, after having been two or three years decaying, make admirable stuff for potting plants and for flowers in general.