

Strange Traveling Methods of Seeds

SOME seeds make journeys with wings, and others travel from place to place by attaching themselves to the clothes of men or the hair of animals; still others make their journey in the stomachs of birds. These are facts that will interest the young people who are taking an interest in agriculture and are working in a garden at home or at school. According to the United States Department of Agriculture's specialist, the seed as the starting point in a life cycle of a plant may well be studied first by young gardeners.

The seeds of the maple tree are particularly interesting. They are provided with wings, and when they become detached from the parent tree a gentle breeze will carry them a considerable distance from the branch to which they were attached. There are many forms and modifications of the winged seed, as the linden, the hornbeam, the elm, and the pine. These are all common trees from which seeds for illustrative purposes can be secured.

Some seeds are also provided with parachutes or umbrellas, not for protection from rain and storm, but for purposes of locomotion. The seeds of the thistle, the milkweed, and the dandelion—in fact, the seeds of all plants which have a cottony growth—are provided for these aerial journeys.

Besides these, some seeds are provided with hooked appendages by which they can attach themselves to the clothing of men or to the hair of animals, so that

they become transported from place to place. Other seeds have hard seed coats, or shells, which are covered in many cases by edible fruit. The fruits are eaten by birds, but the seeds are not digested, and in this way become distributed from place to place.

The groves of cedars which are characteristic of the landscape in many sections of the country, it will be noted are chiefly placed along the lines of fences or fence rows. The fruit of the cedar is an edible one, but the seed is not digestible, and in this way the existence of these hedge rows of cedars is explained. Cherries, grapes, and other fruits are to a considerable extent disseminated in like manner.

The hard nuts of our nut-bearing trees are not used as food by birds or large animals, but are usually sought by squirrels and small rodents, which are in the habit of gathering and burying them in various places or storing them in large quantities for winter use. The result is that a considerable percentage of those which are buried in this manner are never rediscovered by those hiding them, and in time Nature causes the hard shell to crack open, and the warmth and moisture of the soil brings the germ contained in the kernel into life and a tree springs into existence.

It will be noted that the nuts which were buried by the squirrels did not germinate immediately after being buried, but waited until the warm weather of the Spring came before they put forth their tender shoots. This is not because they willed it, but because the hard outer walls of the shell would not admit the air and water to the germ, so as to stimulate its growth.

It was necessary that the shell be frozen and broken by the action of the frosts and the weather before moisture could gain an entrance to cause the swelling of the germ. This peculiarity, when taken advantage of commercially, is called stratification. Seeds with hard shells, such as cherries, peaches, plums and the like, have to be stratified—that is, they must be planted in the Fall where the plants are to grow or they must be packed away in boxes of sand in a position where they will freeze and remain frozen during the Winter, in order that they may germinate the following Spring.

If seeds of this character are stored and kept dry during the Winter they will not germinate if planted in the Spring. Seeds with thin seed coats, however, like peas, beans, etc., if treated in like manner, will be destroyed by the action of the cold, and no plants will result from planting them in the Autumn.

Such seeds must, from the nature of the case, be retained in a dry and comparatively warm place during the Winter season, in order that their vitality may not be destroyed.

Cranberry Industry.

Manufacture of juices out of the cranberries raised in the marshes on North Beach, Wash., may soon become a fact, according to H. H. Tinker, cranberry dealer of Long Beach.

"I look to the cranberry as a means of making North Beach famous," said Mr. Tinker. "Already hundreds of acres of bog land have been cleared and set to berries. The yield is profitable and although the initial cost is somewhat steep, when once the vines are in bearing the returns are reasonably certain and the income per acre is most satisfactory. Making juices from the cranberry will no doubt become a new industry in the near future. Experts who have tested the fruit, pronounce its quality excellent for this purpose. The commercial possibilities of the cranberry, which are already assuming significant importance, are an inviting field for investors. Hundreds of persons are given employment on the marshes annually at the present time."

"Don't's" in the Hog Business.

The following are some "don't's" learned in the hog business:

Don't try to raise hogs without good warm quarters; build the house first.

Don't keep the hogs shut up in a small pen; they are the cleanest animals on the ranch if given a chance to be.

Don't change a sow's nesting place at farrowing time; if she is in a straw stack, leave her there until the pigs can walk home. Be sure, of course, that she is well fed and warm.

Don't keep a fat hog after he is fat, as he won't take a second growth. You will waste feed for nothing.

Don't feed hogs from a sack; always use a pail, and be sure to rattle the pail; they will soon learn what it means.

Don't drive hogs; call them. One man can call 20 hogs where 20 men cannot drive one hog.

Don't engage in this business just for the dollars and cents. If you don't like hogs, raise sheep.

Safety First!

Farmer—When's the next train north? Station Agent—In an hour.

Farmer—When is the next train south? Station Agent—Fifty minutes.

Farmer—All right, Mirandy, we can get across the tracks.



"Pig-A-Boo" Digester Tankage

Is not a tonic, medicine or stimulant. It does not "Tone" up the system from a medicinal standpoint, but it does from a food standpoint—strengthening and fortifying the system against swine epidemics, as it properly balances the ration.

It is made from fresh, wholesome pieces of meat and contains 60 per cent concentrated animal protein.

It can be fed wet or dry, mixed with other foods.

If you want your hogs to have the proper frame and muscle feed them

"Pig-A-Boo" Digester Tankage

Feed prices are high—another reason for feeding Digester Tankage (as made by the Union Meat Co.) to your hogs. It will reduce the cost of putting pork on your hogs per pound of feed fed them.

Send today for information folder D89. It's yours for the asking.

UNION MEAT COMPANY
NORTH PORTLAND, ORE.

960-Acre WHEAT RANCH

960 acres. 700 acres fine wheat land. Balance good bunch grass pasture. 400 acres in Fall-sown grain. Fair buildings. Plenty of water. Fenced. On county road, phone line, etc., 12 miles from good town and railroad. Crop, stock and machinery, etc., goes with place. \$25 per acre. \$2500 cash. Balance crop payments. Located in one of the best wheat belts of Eastern Oregon. Write for list of Eastern Oregon stock and wheat ranches.

Acme Realty Company
301 Equitable Building,
Tacoma, Wash.

AGENTS!

ANTI-RUB is a Money Maker for Agents; it gives entire satisfaction to users, thus making repeat orders certain. No better way to build up a pleasant, profitable and permanent business in your own community.

Ideal Supply Co.
206 Stewart St. Seattle, Wash.

Send Us Your Magazine Subscriptions

We will give you prompt, satisfactory service. Tell us your favorite magazines and we will give you the best club price that you can possibly get. We save you money. Single subscriptions taken at regular rates.

H. F. Steubing
Panama Bldg. Portland, Or.

HIDES
FURS, WOOL, PELTS, ETC.,
HIBBARD - STEWART CO.,
Seattle, Wash.
Write for Price List and Shipping Tags.
(Please mention this paper.)

Water Tanks
Write for Catalogue
Harbor Commercial Co.
Cosmopolis, Wash.

Get a free farm

—make your fortune on wheat

The present high price of grain is bringing thousands of American farmers to Western Canada. A fortune awaits you in the wheat country. Pick out a 160-acre free farm from the 125,000 recently surveyed homesteads in districts reached by the Canadian Northern Railway. The best farms naturally will be selected first. Go now.

Get our free book

"The Homeseekers' and Settlers' Guide." It's full of facts about America's richest farming country—125,000 recently surveyed free fertile farms—American farmers are getting rich on Canadian wheat farms—we will help you select your free farm.

Write today for free information to Homeseekers regarding low rate round-trip tickets to all points in Western Canada. Even if you have already selected your farm, it will pay you to travel on the Canadian Northern via the Duluth, Ft. Frances or St. Paul and Winnipeg gateway, with stopover privileges. Canadian Northern lines serve over 4,000 miles of Canada's richest farming country.

Act quick and get your pick of the best farms. Be sure to write today for a free copy of "The Homeseekers' and Settlers' Guide" and low rates to Canada. A fortune is waiting for you.

Canadian Northern Ry.
E. Y. Wright, Gen. Agt.
Cor. Fourth and Jackson Sts.,
St. Paul, Minn.

Koveralls Keep Kids Kleen

Practical, Healthful, Economical
Garments for Small Children

Practical. Because they are made in one piece, and can be slipped on or off instantly. They fit and look well, and yet are loose and comfortable in every part.

Healthful. Far superior to bloomers. No tight elastic bands to stop free circulation of blood and retard freedom of motion.

Economical. Saving wear on good clothes—saving washing—so well made they are outgrown long before they are worn out.

Ask Your Dealer For **KOVERALLS**
ALL RIGHTS RESERVED

Made in high neck with long sleeves, or Dutch neck and elbow sleeves. Made of blue denim, or blue and white hickory stripes for all the year wear, and in a variety of lighter weight materials for summer wear. All garments trimmed with tan-color red or blue galatas. Sizes 1 to 8 years.

75c the suit A new suit FREE if it rips
Awarded Gold Medal at Mechanics' Fair 1913

If your dealer cannot supply you, we will send them, charges prepaid, on receipt of price, 75c each.

Made By
LEVI STRAUSS & CO., San Francisco