



AMERICAN SEED GROWING

Cheap Seeds the Most Expensive

GUY ELLIOTT MITCHELL

Broadly speaking, the growing of farm and garden seeds may be considered the most important of agricultural industries, for unless the quality of the seed is maintained, the succeeding crop is greatly diminished in volume and deteriorated in quality, so that if applied to the country as a whole, the loss would be enormous.

"The great magnitude of the American seed business is little appreciated," said a prominent seed dealer in describing the car-loads of field and garden seeds which he handles each spring. "The producing capacity of the seeds quickly deteriorates, in most instances, and the most successful farmers buy large quantities of seeds. The farmer is a somewhat cautious individual, and although he buys, on an average, double the amount of seeds he did ten years ago, he has not, in every instance, reached the point where he recognizes that the greatest economy lies in getting the best and patronizing only those houses whose reputation forbids them to sell poor and adulterated seeds."

Seeds Apt to Retrograde.
The deterioration in many seeds is very marked, and large seedmen go to great lengths to produce the best possible seed and to have various establishments in different parts of the country where the conditions are the best for production. It is not possible that the best results can be attained in producing a great number of seeds on any one farm or in any one locality, however favored. The soil and climate which may be the best adapted for producing one kind of seed may result only in a very inferior seed from some other kind

lies idle and he curses his luck which has thus shown itself against him, whereas the fault was his own, and he was simply penny wise and pound foolish.

This can be said of many different kinds of seed.
Or suppose he buys expensive early cabbage or radish seed, it is an easy matter for the unscrupulous dealer to mix this seed half and half with very cheap late cabbage or radish seeds, previously killed (so that they will not come untrue to name), and unless the buyer is particularly observant it may never occur to him that he has been bamboozled.

Tricks of Some Dealers.
Another method of defrauding the seed buyer, practiced by cheap seedsmen who never expect to do business a second time with the customer, is to sell him outright the cheap seeds of some plant such as a muskmelon, for instance, under a label of some new or high-priced variety. He puts in a hard season's work trying to raise good muskmelons, and at the end he finds he has a heterogeneous collection of inferior sorts. Still another practice which the reputable seedsmen will not countenance is to sell seeds which may be true to name and which will also germinate, but which are weak and poor. An example of this was noticed by the writer in the Colorado muskmelon fields. The Rocky Ford cantaloupes had for some years attained a country-wide fame through their sweetness and fine flavor. They were shipped all over the United States. Then came a great demand for

abolishes a system whereby the Congressmen who want to keep in touch with his constituents has an opportunity to mail out a little package of garden seeds to his entire list of voters, he cheerfully votes against the measure and instead votes for an appropriation of over a quarter of a million of dollars a year for free garden and flower seeds. If somebody would introduce a bill, even with this big appropriation, but specifying that the Secretary of Agriculture should expend the money in procuring and distributing only such seeds and

purchase in open market samples of seeds of grazing and forage plants, test the same and publish the names of persons selling adulterated seeds.

So extensive is the seed business in the United States that many seedmen go to an enormous expense in publishing each year catalogues giving the many varieties offered for sale by them.

Home Tests of Seeds.

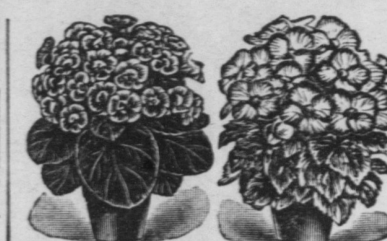
The Department of Agriculture in order to aid farmers to determine for themselves without much trouble the germinating qualities of seeds purchased by them, has issued a number of bulletins upon the subject. A very simple apparatus for sprouting seeds is described in the bulletin. It consists of a shallow tin basin or one of granite ware. The bottom of the basin is covered with water and a small flat bottom of porous clay is placed inside. The seeds after having been soaked are laid between two layers of moist blotting paper or flannel cloth. A pane of glass covers the dish, which is to be kept in a temperature of about 70 degrees. The atmosphere of an ordinary living room is suitable if care is taken to set the apparatus near a stove at night. The basin may be left

BURPEE'S SEEDS ARE THE BEST THAT CAN BE GROWN

If you want the choicest vegetables or most beautiful flowers you should read BURPEE'S FARM ANNUAL FOR 1906, — so well known as the "Leading American Seed Catalogue." It is mailed FREE to all. Better send your address TO-DAY. W. ATLEE BURPEE & CO., PHILADELPHIA.

HOW TO BUILD AN INCUBATOR & BROODER

We will send Complete, Illustrated, Foolproof Incubator and Brooder plans free showing how to build your own machines at little cost. Anyone can do it. Also see illustrated catalogue of Incubator and Brooder Supplies. Write for both. H. M. SHEER CO., Quincy, Ill.



A MOST VALUABLE BOOK

on fertilizers and how to use them, entitled "FOOD FOR PLANTS," is being distributed by the Nitrate Propaganda, New York. A post card with your address will bring you a copy free. Nitrate Propaganda, Anderson Building, New York

40 BULBS, 25 Cents.

For in or out of doors growing Gloriosa, Begonia, Iris, Solida, Tuberoses, Jougosa, and also six free. Tulips, Hyacinths, Crocus, Japan Lily, Snowdrops, Narcissus, Allium, Gladiolus, Fanny, You Star, Stamps or coin, we will send this magnificent collection of flower seeds, 20 varieties, FREE. Order to-day and be sure to get them in time for planting. WOODLAWN NURSERY, MALDEN, MASS.



SEED LETTUCE AND ONIONS IN HEAD

plants as may be of real value to the farmer in a Congressional district, new and improved varieties, even though only one package could be sent out where now a score or two are sent, the expenditure would be defensible. This would be building up our agriculture, and there would be cases where the entire agricultural output would be changed, greatly to the advantage of the farm. The Secretary is, in fact, employing this idea, as far as he is left any discretion in the matter of seed distribution. He is allowed by Congress a small appropriation of this free seed money, and where his explorers in the old countries of the world have brought in new plants and seeds which it is believed will be an improvement on those already grown by American farmers, he sends these out in sufficient amount to admit of a rational test by a farmer.

Time to Abolish the System.

As it is now carried out, the free seed distribution should be stopped, and the work of supplying the ordinary farm and garden seeds, the results of which are known to everybody, should be left to the regular seedmen.

The seed business of the United States is one of great magnitude. While there are, of course, unscrupulous and fake seed houses who do not hesitate to adulterate the seeds they supply, the reputable firms take great care in seeing that their seeds are not only fresh, with good germinating powers, but true to name. The old-fashioned way was for each grower to save his own seed, but in many of our principal crops it is found that the seeds grown in certain localities produce heavier yields, and while if the planting is done a little out of the original habitat of the plant the first crop may not appreciably deteriorate the second year, the crop from that seed will show a marked falling off in yield. It is for this reason that some of the wisest farmers and planters send regularly considerable distances for seed. The seed catalogues always carry a number of pages of novelties and new varieties which are described in an extremely attractive form. It is well enough to try these novelties, but it is good advice to consider them as such and have the main crop to fall back upon from the standard or well-tried varieties which have stood the test of years.

An examination of many of the seeds of common vegetable and forage reveals the fact that an immense amount of poor seed is sold to American farmers and gardeners. Farmers as a rule are responsible for this condition, since, as has been said, many of them buy the cheapest seed in the market and trust entirely to luck for it to produce the entire crop. Such seed is dear at any price, and is withal one of the principal sources of the hosts of bad weeds which are to be seen upon many farms. For the last few years there has been a constantly increasing outcry against

partly open from time to time to admit the exchange of air and gases, using a good-sized dish with small saucers and renewing the water occasionally. Several kinds of seed may be tested at once at a trifling cost. The Department cautions the farmer against extremes of temperature and excessive moisture during the experiments. In some of the larger and more reliable seed houses of this country there is a well-equipped and appointed incubator room in which tests are made by the seedmen in order to ascertain whether or not the seeds will really grow. This is done with every lot of seed that comes in the warehouse and before distribution through the country. Results of



A HUNDRED ACRE RADISH FIELD.

these growths are recorded in a book and kept for ready reference in the event of complaints. The busiest times in the American seed warehouse is from November to March, and often April, when enormous quantities of seeds and bulbs pass through the buildings first in large sacks and later in smaller packages by mail and express on their way to the progressive American agriculturist.

Preserving Strict Silence.

In Korea the women, on their wedding day, will not open their mouths to speak, no matter what the temptation or provocation. Sometimes this silence is continued through the first week of married life. Although no such custom exists in the Western world, extraordinary cases are not wanting. In the early forties a New York lady undertook, for a wager of \$150, to remain mute during the month of her married life.

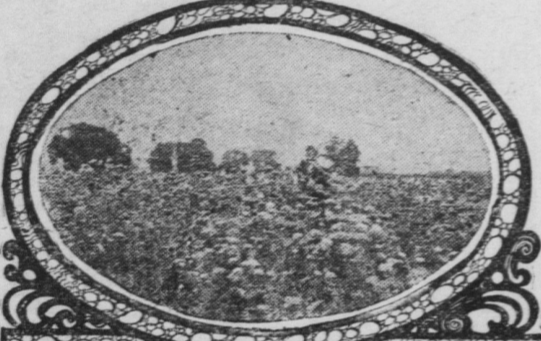
Her new-made husband, who, naturally, was not in the secret, was so much incensed at his bride's behavior, that he left her before her task was completed, only to return later when apprised of the real reason for this unnatural silence. On one anniversary of their wedding day a Brussels couple quarrelled so bitterly that the wife, in a passion, vowed that her husband should never again hear the sound of her voice. She would there and then have left the house, but her now penitent husband implored her not to desert him. To that extent only did his entreaties prevail, for she kept the letter of her oath and never in her spouse's presence did she unloose her tongue.

An Austrian woman, whose husband was in hiding from the authorities, inadvertently betrayed his whereabouts to a neighbor, who was secretly in the pay of the police. As a result, he was taken, and received a term of imprisonment.

So much did his wife take to heart this misfortune, which had been brought about by her gossip, that she resolved for the remainder of her life to remain mute. She would not make an exception even in her husband's favor, for, although she received him on his release with the utmost affection, she maintained an obdurate silence till her death, three years later.

Cordial Foreign Relations.

Mrs. O'Riley—And are you on spakin' terms wid Mrs. Zylonski.
Mrs. Murphy—Ay course I am. She called me a thafe an' I told her she was another.



A Field of Seed Lettuce.

Parsnip Growing For Seed. California Scenes.



Courtesy A. J. Peters, Department of Agriculture.

of plant. So that seeds, as they are handled by the big seedsmen, are gathered in by them from all parts of the country from Maine to California. In the latter state some of the vastest seed fields of the world are found, where the eye ranges over unbroken rows, miles in extent, at least as far as the eye can reach. If all this industry should cease for a year and the farmer and gardener became dependent for the succeeding crop on the seeds which he would himself save during the year, the shrinkage in production throughout the country would amount to tens of millions of dollars.

In the Olden Times.

Of course, in the early days each farmer saved his own seed; possibly he exchanged seeds with one or two neighbors or friends. At that time there was little competition in farming, the production of the farm was used mainly for the support of the family, and the farm supplied practically all the necessities and even the luxuries of life.

The earliest seed-farm in the United States is believed to have been started by David Landreth, the originator of the present big seed house. This was before the Revolutionary war, on a small farm, now included in the city of Philadelphia. It is estimated that over 250,000 acres, including land in probably every state in the Union, are now devoted solely to growing seed crops, and some of the largest growers plant annually as high as 2,000 acres.

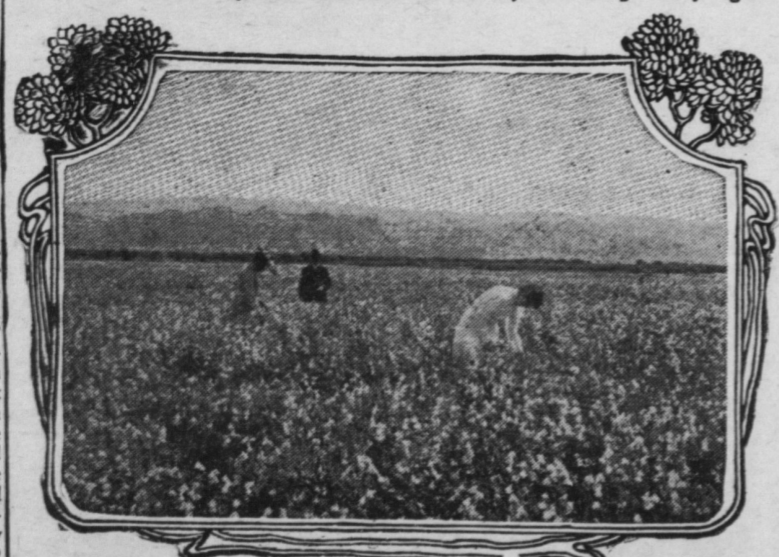
Get Good Clover Seed.

The advantage of securing good germinating seed is manifest. Take for instance clover seed which is sown on wheat-stubble in the spring. It is always possible to secure it at 50 cents or \$1.00 per bushel below the market price quoted by the reputable seedsmen. What is the result of using such seed? It must be considered a foregone conclusion that such seed is poor, worth even less than the reduced price at which it is offered. The land has been prepared for pasture or hay, some of the fertilizer used on the wheat crop still remaining in the soil for the use of the clover and timothy, and the grass and clover seed is sown to become the dependence of the farmer for his hay crop. He buys cheap seed; 30, 40, 50 or 60 per cent. of it is an adulteration of seed which has been killed or is old, dead or weak clover seed. The remainder is good, fresh seed. If he buys this seed, likely putting off purchase until the eleventh hour, and uses it without testing its germinating qualities, he may be lucky if he gets half a stand. In other words, half his land

Rocky Ford seed. At the end of the cantaloupe season various individuals could be seen going over the Rocky Ford cantaloupe patches and disemboweling immature and frosted cantaloupes for their seed. This seed, it is true, was genuine Rocky Ford cantaloupe seed, and it would probably germinate 95 or 98 per cent, but it is obvious, its sale as first-class seed was an imposition. Nevertheless thousands of packages were annually foisted upon seed buyers.

So if you are going to buy seed, and buying seed to a greater or less extent is advisable, not to say necessary, it becomes a foregone conclusion that it pays to buy good seed and therefore to know from whom you are buying.

The Government Seed Business.
The Agricultural Department is busier than usual sending out millions of packages of free seeds for Congressmen. It should be understood that this free seed distribution, while carried out by the Secretary of Agriculture, is no scheme of his, but is a Congressional affair, pure and simple. In every session there is one or more bills introduced abolishing what has been termed by more than one



AN OCEAN OF SWEET PEAS. Flower Seed Growing is an Extensive Industry.

Congressman the free seed farce, and speeches have been made annually denouncing the practice, showing that it is unnecessary and unprofitable and a waste of public money; yet when it comes to voting for a measure which

the seeds sold by unscrupulous dealers and with it a demand for legislation, Congress and a few states have passed laws regulating the trade in seeds. The Secretary of Agriculture under an Act of Congress has authority to, and does,

EVERYTHING for the GARDEN

is the title of Our New Catalogue for 1906—the most beautiful and instructive horticultural publication of the day—186 pages—700 engravings—7 superb colored plates—7 duotone plates of vegetables and flowers.

To give this catalogue the largest possible distribution, we make the following liberal offer:

Every Empty Envelope Counts as Cash

To every one who will state where this advertisement was seen and who encloses Ten Cents (in stamp), we will mail the catalogue, and also send free of charge, our famous 50-Cent "Henderson" Collection of seeds, containing one packet each of Giant Mixed Sweet Peas, Giant Fanny Fancies, mixed Giant Victoria Asparagus, mixed Henderson's New York Lettuce, Early Ruby Tomato and White Tippea Scarlet Radish; in a coupon envelope, which, when emptied and returned, will be accepted as a 25-cent cash payment on any order amounting to \$1.00 and upward.

PETER HENDERSON & CO.

35 & 37 Cortlandt St. New York City.

FAT PEOPLE

I Will Send You a Trial Treatment Free

I can reduce your weight Three to Five Pounds a Week and turn ill health into robust health, mental sluggishness into activity, and relieve that feeling of fullness and oppression by producing healthy digestion and assimilation. No distasteful dieting or starvation, no starving, no nauseating drugs or sickening pills that ruin the stomach. I am a regular practicing physician and a specialist in the successful reduction of superfluous fat. My new and scientifically perfected method strengthens the heart and enables you to breathe easily, and quickly removes double-chin, large stomach and fat hips. Prominent physicians advise their patients to take my treatment and leading doctors themselves are my patients. I absolutely guarantee satisfaction in every case. Write to-day for free trial treatment. I will also send you free my new book on Obesity. It will give you detailed outline of my treatment; it will be sent you free. Address: HENRY C. BRADFORD, M. D., 212 Bradford Building, 30 East 22d Street, New York City.

THEY ALL WANT IT!

Have you seen the "Imp Bottle?" Very perplexing trick, but easy when you know how. We'll tell you how and send sample for 10 cents.

Patent Egg Separator. Every Household, Hotel, Restaurant, Bakery, Drug Store, in fact any place where eggs are used needs one or more. Instantly separates yolk and white, not a particle of the latter remaining in the Separator. Does not break yolk. Made from solid piece of metal. Always bright and ready for use. Sample 10 cents.

KANCY SUPPLY CO.

Box 215, Washington, D. C.
Agents wanted for these and other goods. Write for circulars and terms.

HOW TO MAKE SCHOOL GARDENS.

By H. D. Hemenway.

This suggestive little book is a practical manual of school gardening for both teacher and pupil, and supplies the first adequate work of the sort in this country. This volume is based on actual experience (the author is an authority and director of the Hartford School of Horticulture).

CONTENTS: Introduction; How to Make a Garden; Twenty-One Lessons in Garden Work—May to September; Bibliography; Lessons in Greenhouse Work; Planting Seed, Potting, etc.; Root Grafting; Lessons in Budding.

Size, 5 x 7; pages, 107; binding, cloth; illustrations, 26.

By special arrangement with Doubleday, Page & Co., I am able for the present to make the following

SPECIAL OFFER.

The new Garden Magazine, 6 months, and How to Make School Gardens, \$1.00 edition, postpaid, both for \$1.00.

The GARDEN MAGAZINE is finely illustrated, and is the finest magazine of its kind published in America. To take advantage of this special offer, orders should be sent at once to H. D. Hemenway, Hartford, Connecticut.

This offer may be withdrawn at any time.

ONLY ONE LIFE TO LIVE

That's the Reason Why EVERYBODY should get the most out of life that they can. The place to get it is in the Home, and

MAXWELL'S HOMEMAKER MAGAZINE

comes every month in the year and tells you

How to Build a Home
How to Make a Garden Around It
How to Live In It
How to Entertain In It
How to Enjoy Life In It

Some of the regular departments of the magazine are

The Home Garden Music in the Home Hints to Homemakers
The Home Study Health in the Home Home Etiquette
Home Cooking Little Folks in the Home Home Cheer
Entertaining in the Home

AND REMEMBER

It isn't made with a scissors and a paste pot. There's good "grey matter" goes into every page of it. There's human sympathy in every line of it. There's originality and genuine good hard common sense all through it. It don't under take to tell you how to be happy on a million a year, but it does tell you how to be happy on the modest income that so many millions live on who don't have a million a year to spend. And the magazine costs

10c. for One Whole Year---That's All

And it's worth ten dollars for its good suggestions about life and health and homemaking.

Send your dime or five two-cent stamps to

MAXWELL'S HOMEMAKER MAGAZINE,

1409 Fisher Building, CHICAGO.