

CATERPILLAR IS CABBAGE ENEMY

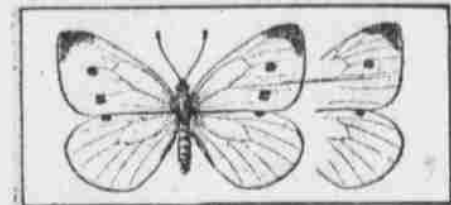
Imported Butterfly is Most Destructive of Many Insects and Other Pests.

IS WELL KNOWN TO FARMERS

Frequently Secretes Itself in Immature Heads Where It is Difficult to Reach With Insecticides—Sometimes Attacks Heart.

The most destructive of the many insects and other enemies of the cabbage family, is the caterpillar of the imported cabbage butterfly, sometimes called the white butterfly, a familiar object to nearly everyone. This is the imported cabbage worm, and is well known to farmers throughout this country and Europe as well, and the butterfly is generally recognized as the parent of the worms.

Bane of Growers.
This cabbage worm has been rightly termed the bane of the cabbage grower and the dread of every careful cook and housewife. It begins



Imported Cabbage Butterfly.

work early in the season; the principal damage is therefore to young plants, and accrues through the necessity of replanting, with attendant increase in cost of production, due to additional labor, cost of stock, and delay in getting the early or better prices in the market. After riddling the outer leaves, which remain afterwards attached to the stalk, the caterpillar attacks the tender inner leaves as they form, frequently secreting itself in the immature heads, where it is difficult to reach it with insecticides, and rendering the cabbage unfit for food because of the abundant dark green excrement which it deposits. As a result, cabbages before being sent to market must be examined carefully and the damaged leaves removed.

Look for Concealed Worms.
Before cooking it is frequently necessary to tear the heads apart to insure that no disgusting worms are concealed within, and even after the vegetable is prepared for the table there is danger of an admixture of animal matter with the vegetable food. In cool weather the caterpillar often feeds freely exposed on the surface of the leaves in the sunshine.
Frequently the caterpillar bores into the center of the cabbage, attacking what is commonly known as the "heart," and then the entire head is worthless for market.

ESTIMATE PLACED ON BEANS

Acres of 800,000 Expected to Yield 8,250,000 Bushels—Below That of Last Year.

The bean crop of the United States last year was about 12,000,000 bushels. While only about three-fifths as large as the crop grown on the exceptionally large acreage of 1918 and 1917, the 1919 crop was almost equal to the crops of 1914 to 1916, which averaged between 12,000,000 and 13,000,000 bushels. The planting is now indicated—about 800,000 acres—with a yield equal to the average of the last five years would produce a crop of 8,250,000 bushels.

DELICIOUS CHRISTMAS SALAD

Endive is Hardy and Can Stand Right Smart Freeze—Bitter Taste Removed by Bleaching.

Endive is quite hardy and can stand a smart freeze. As winter comes on more covering can be added and the family will be supplied with the most delicious salad until Christmas or later if it is carefully hilled and covered so as to turn the rain. This bleaching process not only insures tenderness, but takes out that bitter taste which is so objectionable to many.

PROPER STORAGE OF ONIONS

Diseases Can Be Controlled by Practice of Sanitary Measures and Right Packing.

In general, storage diseases of onions are to be controlled by the practice of sanitary measures, the sorting out of diseased bulbs at harvest, protection from rain after harvest, thorough curing and storage in a dry, well-ventilated warehouse at 32 to 35 degrees F.

GOOD KIND OF ADVERTISING

Neatly Worded Letterhead is Favored by Progressive Farmer—Farm Name Important.

A neat worded letterhead is a good kind of advertising for the progressive farmer. The name of the farm is the big feature of the well-planned letterhead, the chief product second, and the farmers' name third in importance.

ACREAGE OF ALFALFA LARGEST OF LEGUMES

Greater Than That of Any Other Plant Cut for Hay.

Significant Fact That More Than One-Half of Tame Hay Area Now Devoted to Nutritive and Soil-Improving Crops.

Alfalfa now has an acreage greater than that of any other legume or grass cut for hay, not growing in combination with another. Of the total tame hay acreage in 1919, alfalfa occupied 21.1 per cent, timothy and clover mixed 18.2 per cent, timothy 15.9 per cent, clover 12.3 per cent, pea 8.7 per cent, grain cut green, 7.7 per cent, and all others 16.1 per cent. If the acreage of the timothy and clover mixture is equally divided between those two plants, the timothy acreage becomes 25 per cent of the total of tame hay acreage, and clover 21.4 per cent, so that timothy is still the leading hay plant and the clovers have second place, a little above alfalfa.

The leguminous plants, alfalfa, clover, one-half of clover and timothy, and pea are 51.2 per cent of the tame hay area, and it is a significant fact that more than one-half of the tame hay acreage is now devoted to plants of the nutritive and soil improving properties of the legumes, whereas, ten years ago, as the census testifies, hardly one-third of the tame hay area was leguminous. This comparison has been established by the bureau of crop estimates.

KILL OUT CANADA THISTLES

Small Patches of Noxious Plant May Be Destroyed by Cutting Them Off During Summer.

Small patches of Canada thistles may be killed by cutting them off with a hoe or spade several times during the summer or by covering the patch with tar paper or building paper and leaving it in place several weeks. To handle larger fields without losing a crop it is necessary to grow some early maturing crop, like clover, winter rye or barley.

As soon as the crop is harvested, plow the land very thoroughly and



Canada Thistle.

then for the balance of the season keep the land so well disked and cultivated that the thistles never have a chance to show their leaves above ground. This is the only way in which the roots can be starved out. The cultivation may be continued the following season until about corn planting time, and the land planted to corn or other cultivated crop so that any plants that may have survived can be killed or dug out.

ADVANTAGE OF CATCH CROPS

Too Late for Planting Good Yielding Variety of Corn—Sudan Grass Meets Emergency.

It is now too late to plant a good yielding variety of corn, and resort must be made to such catch crops as Sudan grass, sorghum and millet. Of these three, sorghum will give the greatest yield, but Sudan grass yields a finer quality of hay and can be stored to better advantage in the stack or barn.

EXCELLENT CROPS FOR HOGS

Alfalfa and Clover Are Favored as Valuable Pasture for All Corn-Fed Live Stock.

Alfalfa and clover are both rich in protein, an element likely to be lacking in most of our farm feeds. It is for this reason both are so valuable as pasture for corn-fed animals, especially hogs. Another good hog pasture plant, which is not used nearly so much as it should be, is rape.

KEEP ALL GARDENS WORKING

Do Not Stop at Producing Spring and Summer Vegetables, But Get Supply for Winter.

Real gardeners will not stop at producing a crop of spring and summer vegetables, but will follow up the good work with a fresh supply for fall use. To make the garden more nearly efficient, do not permit good land to stand idle, so that fresh vegetables have to be bought from market the latter part of the season.

ROAD BUILDING

PACIFIC COAST GOOD ROADS

Interest Centers Particularly in Highway Extending From California to Washington.

(By HERBERT NUNN, State Highway Engineer of Oregon.)

The Pacific coast is particularly interested in our national highway; that is the Pacific coast highway extending from California to Oregon and Washington. This when completed will have approximate length of some 1,400 miles, and the large part of it is now completed or nearing completion.

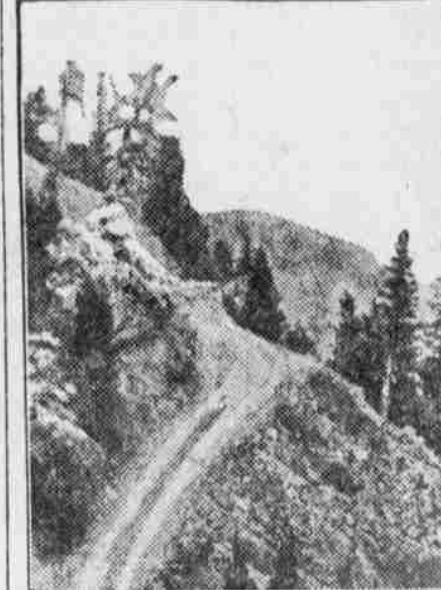
Mr. Fletcher of California stated to me that his state had completed 525 miles, extending from Los Angeles north to Sacramento, and we are now under contract to complete the road. Oregon now has under contract on this road some 400 miles of construction, all of which will be completed by the middle of next year, 200 miles of which will be paved and the rest macadam or gravel. Washington has completed this road to Seattle, and next year its entire length will be complete.

I am unable to say at this time just how much money was expended during the year 1919 in the three states, but in Oregon approximately \$7,000,000 was expended. The three states, however, are pretty well fixed financially.

California has a new bond issue for \$40,000,000 and previously has expended some \$33,000,000. Oregon has some \$32,000,000 available and bonds to cost \$19,000,000 to \$20,000,000 under construction. Washington has less money. They failed to carry the bond issue there this year, but have between \$8,000,000 and \$9,000,000 available for next year.

The eastern connections with the Pacific highway are the Santa Fe trail, the Lincoln highway, and the Midland road. I think the Santa Fe is pretty well cared for. It connects with southern California. In Oregon we are connecting with the southern highway and with the Columbia river highway.

Labor conditions on the Pacific coast are about the same as in the East.



Improved Road in Oregon.

The pay is about \$4.50 with \$7.50 for teams. We don't expect better labor conditions next year. Material conditions are better. In Oregon we have sufficient local material and don't require much rail transportation. Washington is fixed similarly. So is northern California. Southern California is in worse condition as to transportation.

MOTORTRUCK IS INSISTENT

War Brought It Into Prominence as Commercially Practical Form of Transportation.

The value of the motortruck as a commercially practical form of transportation and while the fighting has ceased, the need for the motortruck remains with us, more insistent than ever before. Within certain limitations the freight car of the highway is more efficient than the rail carrier, and, because it is, it may be taken as a permanent form of transportation and one destined to have a large influence on the movements of trade in the future.

PUSH GOOD ROADS BUILDING

Construction Work Retarded by War Should Now Be Resumed to Facilitate Transportation.

Good roads construction retarded by the war should now be pushed vigorously and nothing should be permitted to interfere with the expansion and development of these important arteries of transportation and trade which can serve to materially reduce high living costs by facilitating the movement of foodstuffs from the farm to the table.

Significant Auto Fact.

Observers are said to regard it as significant that the states which will spend most freely for better highways and which manufacturers depend upon to buy the most motortrucks in 1920 are states in which farming is the predominant occupation.

Value of Motortruck.

The value of the motortruck as an aid in marketing farm products is now well established. In bringing this about improved roads have been an essential factor.

FARM POULTRY

BREAK FOWL OF BROODINESS

Hens Should Be Confined to Small Coop Raised Off Ground, Preferably With Slat Bottom.

When hens become broody, they should be "broken up" as quickly as possible, for the sooner this is done the sooner they will resume laying. To break a hen of broodiness she should be confined to a small coop raised off the ground, preferably with a slat bottom. Give her plenty of water to drink; she may be fed or not, as desired. Not much difference will be found in the time required to break her of broodiness, whether she is fed or made to fast, United States department of agriculture poultry specialists say. Usually from three to six days' confinement will break her, but some hens require 10 to 12 days.

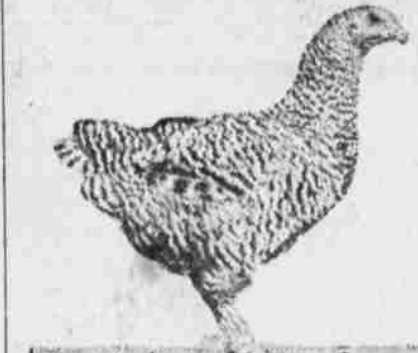
The broody hen will be recognized by her inclination to stay on the nest at night, the ruffling of her feathers and her picking at anyone who approaches her, and by the clucking noise she makes. The fact that her broodiness has been broken up can be recognized by the disappearance of these symptoms.

POULTRY FOR GENERAL FARM

Hens as Main Dependence for Increasing Meat Supply—Farmer Must Determine for Himself.

The hen, first and last, is the main dependence for increasing the supply of white meat and eggs on a farm, but she requires the aid of turkeys, guinea, geese, and ducks just as, on a dairy farm, the cow requires the aid of pigs, sheep, and goats. The setting of the standard at 100 hens per farm is safe, but no such arbitrary standard can be set for the other kinds of poultry, say the poultry specialists of the United States department of agriculture.

The small farm, with grain fields of neighboring farms in proximity to the barn and dooryard, would, perhaps, be better without turkeys. The farm through which no streams run and which has no large pond would perhaps be better without ducks. But the circumscribed farm on which turkeys would be a disadvantage may be well supplied with streams and ponds so that ducks would be unusually profitable, and the farm that has no streams and ponds may have large range for turkeys. Each farm family will have to determine for itself what



Barred Plymouth Rock is Excellent for Eggs and Meat.

poultry can be profitably kept in addition to 100 hens, bearing in mind always that an adequate number should be kept of all kinds for which free range can be found.

FOOD SUPPLY FOR CHICKENS

Mineral, Nitrogenous and Carbonaceous Constituents Should Be Furnished for Hens.

In supplying feed to fowls, there are three kinds of constituents which should be present in certain fairly well fixed proportions if the desired results are to be obtained most economically. These constituents are mineral, nitrogenous, and carbonaceous, all of which are contained in corn, wheat, oats, and barley, but not in the right proportions to give the greatest egg yield. In addition, some animal feed and green feed should be supplied.—United States Department of Agriculture.

POULTRY NOTES

Keep the nests clean; provide one nest for every four hens.

Chicken mites are one of the causes of the high cost of eggs.

A fine thing for warm weather is either skim milk or buttermilk.

Sell, kill or confine all male birds as soon as the hatching season is over.

A good cockerel generally is worth all the cost and a poor bird is dear at any price.

If you do not care about having meat for the table and want chickens for eggs only, choose the White Leghorns or Anconas.

It is a good plan to give the poultry house a good coat of whitewash at least once a year; sometimes it will be advisable to whitewash it twice a year, fall and spring.

WASHINGTON SIDELIGHTS

Secretary Payne Eager to Develop Alaska



Secretary Payne Eager to Develop Alaska.

WASHINGTON.—Secretary of the Interior John Barton Payne has made the development of Alaskan resources one of the chief purposes of his administration and is now making a trip to the peninsula. Accompanying him is Dr. Alfred H. Brooks of the geological survey, who was chairman of an interdepartmental Alaskan advisory committee appointed by Secretary Payne in April, which recently made a report recommending various steps for the bettering of conditions in Alaska, with a view to the development of large natural resources.

Secretary of the Navy Daniels joined Secretary Payne and Dr. Brooks at Seattle. Secretary Daniels is interested in the question of the development of coal resources of Alaska as a means of furnishing a supply for the navy.

Other members of the Alaskan ad-

visory committee serving with Dr. Brooks were H. Y. Saint of the shipping board; Otto Praeger, second assistant postmaster general, and E. A. Sherman of the department of agriculture. The recommendations of the committee include the following:

Lowering of ocean freight and passenger rates and improvement of transportation and mail service through economies introduced by the combination of two existing steamship lines into one.

Concentration and co-ordination of federal control of Alaskan lands and resources by obtaining legislative authority for an Alaskan development board and, pending this, by the appointment of an interdepartmental Alaskan committee.

Co-ordination of federal road construction, and the development of a plan for a comprehensive system of roads and trails to serve the entire territory; also the requesting of an appropriation of at least \$1,000,000 for the inauguration of this system.

Investigation of the commercial feasibility of smelting Alaskan copper ores within the territory.

The immediate development of an Alaskan pulp wood industry and additional surveys of timber and water power, looking to the largest possible development of this industry.

To Sort Out Government Departments

THE joint committee proposed for the purpose of forwarding the reorganization of the administrative branch of the government is to have considerable leeway in its work. The joint resolution is in substance as follows:

"Resolved, etc., That a joint committee be created, to be known as the joint committee on reorganization, which shall consist of three members of the senate to be appointed by the president thereof and three members of the house of representatives to be appointed by the speaker thereof.

"That it shall be the duty of the joint committee on reorganization to make a survey of the administrative services of the government for the purpose of securing all pertinent facts concerning their powers and duties, their distribution among the several executive departments, and their overlapping and duplication of authority; also to determine what redistribution of activities should be made among the several services, with a view to the proper correlation of the same, and what departmental regrouping of services should be made, so that each executive department shall embrace only services having close working relation with each other and ministering directly to the primary purpose for which the same are maintained and operated, to the end that there shall



Reorganization of government departments.

be achieved the largest possible measure of efficiency and economy in the conduct of government business.

"That the committee shall from time to time report to both the senate and the house of representatives the results of its inquiries, together with its recommendations, and shall prepare and submit bills or resolutions having for their purpose the co-ordination of government functions and their most efficient and economical conduct, and the final report of said committee shall be submitted not later than the second Monday in December, 1922."

The officers and employees of all administrative services of the government are required to furnish to the committee such information regarding powers, duties, activities, organization and methods of business as the committee may from time to time require.

Farmers Resent Being Classed as Boobs



LET'S FIX THE PRICE.

played on his farm. And so with his fertilizer. Everything he bought he had to pay a price fixed in advance by some one else.

"Everything he sold of his own production some one else fixed the price which the farmer was compelled to take, the price fixed by another than himself.

"The time has gone by when the farmer will be content with a state of affairs in which the value of the productions of his labor shall be determined by other people, while he himself takes the price as fixed by himself. He is no longer content to be put in the class of boobs, to be looked down upon as of the mental class of our national life, a man fit only for raising the foodstuff and the material for clothing.

"And I venture to predict, Mr. Speaker, that if the time ever comes in our national life when the farmer is regarded as a lower order of man, if he is looked upon as worthy merely of a contemptuous consideration, and carelessly esteemed as a factor in our national life and stability, that time will mark the hour when this nation begins its downward course to extinction."

One of Reasons Why H. C. L. Waxes Fat

THERE seems to be no question that one of the remedies for H. C. L. is better distributing methods, anyway. Representative Summers of Washington told this story in the house just before congress adjourned:

"A bright young lad, the son of a well-known lawyer of White Salmon, a town of my district, was on his way home from school and stopped in at his father's office.



"Say, Dad," he said, "why are they bringing in White Salmon tomatoes on the Portland, Ore., steamboat?"

"Well, well," said the lawyer, proud of his son's perspicacity, "that is peculiar. Let us go down and see about it," and off they strolled to investigate.

"At the dinner table that night the result of their investigation was reported to the family and here is the story in brief:

"Fine, big half-ripe tomatoes, grown within a quarter of a mile of White Salmon, had been picked and packed in crates, sold to a commission agent in White Salmon, hauled down to the commission warehouse, re-sold to a commission house in Portland, 100