## O'NEILL FRONTIER



**CROSS-BREEDS PROFITABLE** When you take a bunch of pure-bred sows of one breed and cross them with a purebred boar of an-other breed, you are likely to get pigs which will gain faster and re-quire less feed per unit of gain than will purebred pigs of either par-ent breed. This is the conclusion one must draw from three years of ent breed. This is the conclusion one must draw from three years of experiments carried on at one of our foremost experiment stations. In these crossing experiments Pol-and-Chinas and Duroc-Jerseys have been used. In the three years, the cross bred pigs have gained an av-erage of 1.41 pounds per pig daily, as compared with 1.32 for their pure-bred half brothers and sisters, both groups being fed side by side on the same ration and handled in exactly the same manner. In other words, the same manner. In other words, the cross breds have gained about a tenth faster than the purebreds. In going from an average weaning weight of 75 pounds to a good mar-ketable weight of 225 pounds, the cross breds would get to market from 10 days to two weeks sooner than the purebreds. This is import-ant in the fall, when hog prices normally take a rapid downward trend. In addition to the more rapid gains, the cross breds use their feed to better advantage. In the Iowa tests, the cross breds have required an average of only 349 pounds of feed for each 100 pounds of gain, while the purebreds have taken 365. This means that for every 100 pounds of gain made, the cross breds would require about 16 pounds less feed. Still other advantages have been noted for the cross breds. They have developed more uniformly, have shown greater vig-or and a more healthy appearance. This may justify the claims made by some farmers, that cross breds are more disease resistant than purebreds, though they are not yet prepared to say to just what extent this is true or how important this difference may be. The cross bred pigs in the three experiments have averaged nearly five pounds each heavier at weaning time than the purebreds, even though both had the same mothers. That is, in the the same mothers. That is, in the tests the sows each year have been double mated, or bred to two boars —to one of their own breed and to a boar of the second breed used in the crossir- work. By this system, both purebred and cross bred pigs have been obtained in the same lit-ter. The plan has been to breed the sow to one boar and then to the other within a few minutes. With two breeds of distinctly different color—red and black in this in-stance—the cross bred pigs have been readily distinguishable from the purebreds. This system of breeding to two boars has elimin-ated the differences in the gain-ing ability of the pigs due to breading ability of the pigs due to breed-ing, as far as possible. It makes more certain that the difference in

been brought face to face with the fact that the lowly, much maligned chickens have been paying for the concretes have been paying for the groceries, the shoes and his "smokes." He has become interest-ed in this poultry business and now plans with his wife to build a brooder-house, fix up the hen-house, learn more about correct feeding, and try to make their poultry-keep-ing more profitable ing more profitable.

### BINDWEED CONTROL

Eindweed spreads by both runners and seeds and in a few years can cover a whole farm with a heavy growth. During this period the val-ue of the farm will be reduced from that of improved agricultural land to the value of poor grazing land and the farm will become a source of danger to the entire neighbor-hood. The best way to cradicate bindweed is through clean cultivation the first year, followed by alfalfa or some such another crop as cane the second year. The first year the field should be plowed early in the spring, shortly after the wead starts, and from then on should be cultivated frequently, sometimes as often as twice a week A spring tooth cultivator equipped A spring tooth cultivator equipped, with sharp broad shovels is best for this. This summer fallow cul-tivation will so weaken the bind-weed plants that they cannot com-pete the second year with a heavy feeding crop like alfalfa or cane. If cane is planted the ground should he cultivated through the early be cultivated through the early spring and the cane sowed about two weeks after corn planting time. Alfalfa may be planted in August after the first summer of cultiva-tion. It should begin growth so early in the spring that it will smother any bindweed plants that start to grow.

## DON'T FORCE PULLETS

**DON'T FORCE PULLETS** Pullets should not be allowed to come into maturity too quickly. Nor-mally, a pullet starts to lay eggs as soon as she has reached maturity and her body has ceased to grow. Sometimes laying starts somewhat before full growth has been reached and further growth may cease. Such pullets may remain undersized and their eggs may be defective and small. If pullets are maturing too rapidly their mash and animal food should be reduced. The grain rations also may be slightly in-creased, as pullets should have a good reserve store of body fat becreased, as pullets should have a good reserve store of body fat be-fore they start laying. Otherwise they will not stand up well under the strain of laying and may fall considerably short of the possible maximum egg production. For that reason, many poultrymen make a marked increase in the quantity of grains fed to the pullets as their grains fed to the pullets as their combs begin to redden. At the same time, they cut down on the mash and animal food: beef scraps on similar material. The grain is fat-tening, whereas the animal food being no longer required for muscle building as the birds reach maturity, may start ere production ba-fore it is desirable.



Probable Successor

General Maxime Weygand, said to have been right-hand man of late Marshal Foch, and on whose shoulders the mantle of the departed war leader will probably fall. The General's genius as a military leader has long been known and the additional fact, just revealed, of the intimacy he enjoyed with the Marshal will probably be the deciding factor in his appointment as succeinor.

(International Newsreel)

# Air Novice Risks Life

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In spite of the fact that she had

never been up in a plane,

Marie Smullen, employe of

Naval Aircraft Factory at

Philadelphia, Pa., was willing

to risk her life in testing new parachute device. "As long as I'm getting a thrill," she said,

"I might as well get a real

one." She got it, too, when

she made the 1,000-foot jump,

proving that new device was

(International Newsreel)

Leads Yale Prom

One of the most important po-

sitions in the power of Yale

undergrads to confer, chair-

manship of the Yale Senior Prom has been awarded to

George Wells, 2nd, of Dayton,

(International Newsreel)

Ohio.

O. K.



Here is the yacht "Restless," belonging to | in New York harbor. General condemnation Stuyvesant Fish, Jr., which customs men admit firing on and boarding in search of liquor | gation by Congress has resulted.

## Father-in-Law Slaver

## of the action and a wide protest for investi-

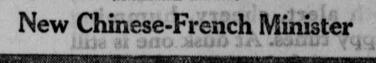
## Martyr of New "Spy" System



Just 16 months after her happy wedding, Mrs. Elizabeth T. Mayher of Fairfield. Conn., met death at the hands of her father-in-law, Joseph Mayher, a shoemaker, when he slashed her throat and his own in a fit of insanity. He had been released from a state insane institution a short time ago.



John W. Snook, ex-warden of the penitentiary at Atlanta, Ga., iorgets his prison worries and takes a new and genuine interest in domestic activities. Snook became "ex" when he resigned from his post as a protest against the spy system in penitentiaries inaugurated by the indomitable Mrs. Mabel Willebrandt. He is shown here at his Atlanta home with his son, Quinton, and toys.



lows: Shelled corn, self fed: supplemental protein mixture (o by weight of tankage, 25 of corn cake oilmeal, 25 of alfalfa meal). self fed; plus mineral mixture, self fed. The mineral mixture contains 19.9 pounds of flake salt, 39.9 pounds of wood ashes, 39.9 pounds of ground bone black and 0.05 pound of potassium iodid. This mineral mixture was self fed. The pigs have had the run of a blue grass pasture. In this cross breeding work, those in charge emphasized from the first that if the cross breds were used for breeding purposes, their pigs prob-ably would not be so good as either the cross breds or purebreds. In order to test this out, last year and bred to purebred boars of the par-ent breeds. The pigs from these cross bred sows bore out what the experimenters had contended-they did not gain so fast nor so economically as either the cross breds or back toward purebreds still further, a few of the pigs from the cross bred sows (these were either three fourths Duroc and one fourth Poland or three fourths Poland and one fourth Duroc) were kept and bred to the boars of the breeds from which they derived most of their blood. This cross resulted in seven eighths Durocs or seven eighths Polands. These seven eighths pigs looked much like purchaeds and could hardly be distinguished from them. Also, they were about the equal of the purebreds in ability to gain rapidly and economically.

gains and economy of gains are due

to crossing. The ration used in all three years from weaning to mar-ket in the crossing tests is as fol-

A REAL BUSINESS Business is defined by Webster as oeing "that which occupies the time, attention and labor of men, for the purpose of profit and improvement." Had Webster been well acquainted with the poultry business, had he with the politry busiless, had he known the part that the present-day farm woman plays in the poul-try industry, he certainly would have included women along with men in his definition. Possibly Weber like meny other good men men in his definition. Possibly Webster, like many other good men in days gone by, didn't consider poultry keeping a business, but thought of it as being a task for wo-men only. I can recall when the average farmer considered that it was entirely beneath his dignity to aid his wife in any way with the was entirely beheath his dighty to aid his wife in any way with the "conserned" chickens. I remember one old farmer who, when his wife would send a basket of eggs with him to trade for groceries, would him to trade for groceries, would dump them in some convenient fance corner along the road just as soon as he was out of his wife's sight. He would then proceed to town and buy the groceries. Times have changed, however, and today we find poultry keeping in a most dignified and enviable po-sition. No longer is the poultryman

in a most dignified and environe po-sition. No longer is the poultryman regarded as a crank and a hobby-ist. No longer does the average farmer regard his wife's chicken as a necessary evil. He has gradually

### DON'T GUESS

Have you prepared to keep farm records this year? Have you determined to ascertain what your production costs are? What it costs to keep each of your cows a year and what each returns for the feed she consumes and the labor she makes for you? All these things and many for you? All these things and most others, when fully understood—not guessed at—will go a long ways to-ward enabling the farm manager to operate his farm on a more eco-nomical basis. We need more definite knowledge on the farm if we are to do our best

## ONCE WEED, NOW CROP

If there is any one thing that stands out prominently as new in stands (ut prominently as new in legume growing, it is the "discov-ery" of sweet clover. The plant i'-sulf has long been known-mostly as a weed. Its great usefulness is a discovery of the last 10 years. So recent has been the rise of this plant to fame, that until the last census no record of its acrease was available. We now know that as a pasture and green-manure

as a pasture and green-manure crep, it is unexcelled where it can be grown. Its very exacting demand for lime is the only check on its rapid spread to those sections where it is not now being grown.

Three things stand out as essen-tial to the successful use of sweet clover for soil improvement-lime and lots of it, inoculation, and plowing under far enough in advance of planting time of the crop that is to follow.

that is to follow. A new effect of sweet clover, as yet little recognized, is that of in-creasing the effectiveness of com-mercial fertilizer, under certain con-ditions. One experiment station re-ports experiments in which the use of fertilizer increased the corn yield (in a corn-source notation) only (in a corn-soybean rotation) only 3.5 bushels, as an average for eight years. When the rotation was changed to corn and grain (sweet years. clover seeded in grain and plowed under the following spring) the av-erage increase from the fartilizer was 8.6 bushels of corn per acre, the most favorable treatments giv-ing increases much larger than that

### DO YOU KNOW HIM?

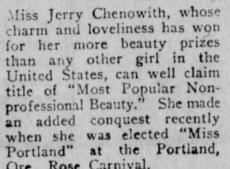
My neighbor says to me, "By jing, first thing we know it will be spring, it's time to fix the harnesses and grease them all up nice." he says. "I warm 'em up and wash 'em grod to git the dirt all out, it would sur-prise you at the dirt there is in them old harnesses, gee whiz. When they are all washed clean, each piece is treated to a coat of grease; I rub it in, that's what I do, until each harness is like new. It makes 'em last lots better, so each winter I don't have to go and buy new har-ness at a sale. I just stay home and save my kale." I told him that one time I tried agressin' up the old cowhide that made them harnesses of mine, when I got done they looked right fine. But it was sure a dirty job, that harness grease it just played hob with my complexion, grease and dirt were smeared all over my good shirt, it was a week or two from then before my hands were clean again. I'd rather wear my harness out than put the dirt and sweat to rout by makin' such a mess as that; I'll leave the dirt where it is at and when the harness gits too stiff I'll buy a newer one, and if I happen not to have the dough, that's one more bill that I will owe!

## **RABBITS FOR PROFIT**

We have been raising Chinchilla rabbits for over five years, says a farmer who believes in diversification. We find them one of the most economical sources of wholesome and nutritious table meat, and in addition the pelts are now bringing us quite a little additional revenue. Rabbits are very prolific. A good doe may be expected to raise four litters a year, averaging from six to seven to the litter. They grow rapid-ly and are ready for the table in three or four months. However, we let spring-born litters grow out till fall, at which time the pelt becomes prime and at its best prime and at its best,

## Most Popular Non-Pre





Ore., Rose Carnival.



One of the latest political developments in France is that of the appointment of Mr. Kao Lou, left, as new Chinese Minister to France. He is shown here with the Right Monsignor Carrier, right, leaving the Elysee Palace following Mr. Lou's formal presentation to M. Gaston Doumerge, President of the French lepublic. (International Newsreel)

## **Coast Guard Ready for Duty**



Inset, Commander S. V. Parker (left) and Commander L. C. Farwel (right), in charge of U. S. cutter "Champlain" (below), one of five new ones, will base at New York, equipped to aid ships in distress at sea, also to remove "derelicts" which menace navigation.

(International Newsreel)

