

OF INTEREST TO FARMERS

KEEP DITCHES OPEN
The biggest problem in maintenance of drainage ditches is recleaning. Trouble is due to silt and sand, plus perhaps grass or weeds. One of the drainage districts in one county, cleaned out its entire system with explosives by using a new method of loading, called the "cross section" method for want of a better name. The method consists of a row down the middle of the drainage ditch with the charges spaced about 18 inches apart. At intervals of from three to six feet and at right angles to this center row, rows are run out toward the ditch bank on each side. The center row is the backbone of the charge and care must be taken that the charges in this row are loaded uniformly deep and uniformly spaced in order that propagation will carry through and connect the rows of holes to each side. The usual precautions of uniformity are also necessary in the rows running out to the ditch banks. This system of loading has been equally successful in removing shoals from ditches and in a number of cases with some variation this method has been employed in blasting new ditches in depths ranging from three to six feet. Cost figures gathered from several sources where this method of loading has been used range from 14 to 22 cents per cubic yard. Would the use of dredge be more costly, you ask. One county maintenance engineer says: "Use explosives when there is less than 100 cubic yards of dirt to move per station. The drainage experts connected with firms making explosives are able to estimate about what a job will cost. Removal of shoals formed by the entrance of lateral ditches, stumps, logs and other debris should be done annually. Explosives have a very definite place in this program. Maintenance is of particular importance where the tile outlets open into open ditches. Unless the outlet ditch is deep enough to permit outlet for the tile, the tile system is hampered and the land is improperly drained."

MONEY IN MANURE TANKS
Our system of using liquid manure is the one thing on our farm which other farmers could profit most following opinion of a farmer, who farms for profit, and his farms has a lot of interesting things to see, including a well-managed pasture rotation, a large dryer and much mechanical equipment. This farm is making money. They do it feeding baby beef, but that's the last paragraph of the story. There are little kinks here and there which speed up the process and contribute profits. The fertilizer bill is kept to a minimum by saving the fertilizer which is produced. Two large barns have concrete floors, gutters and drains. Between the barns is a concrete covered yard which is about 80x250 feet. This yard also has gutters, all of them draining to an underground concrete tank just outside one of the barns and holding 30,000 gallons of liquid manure. The manure is pumped out of this tank for distribution into a 350-gallon tank wagon with a two-inch centrifugal pump driven by a three-horse-power electric motor. The tank wagon has a simple sprinkler arrangement consisting of two nozzles made of three-inch pipe flattened at the ends and directed against two-by-four-inch baffles which act as spreaders. There are 6,000 acres in this farm. All the fertilizer for this farm is manufactured by the 175 beef animals annually fed. This farmer estimates that 20 per cent of his feed is protein and that 75 per cent of this protein can be saved and returned to the soil as nitrates by his method of manure handling. For each ton of feed consumed 300 pounds of nitrates are produced and he does not have to pay freight on it or haul it from the station.

TEMPERATURE FOR LAYERS
The maintenance of a uniform temperature within the laying house has much to do with egg profits. Flock owners have noticed that a drop in temperature usually meant a drop in production where the house could not be properly closed up. A quick rise in temperature brought about the same result. Insulation of the laying house plays its part in preventing the low outside temperature from resulting in a corresponding low inside during cold spells. Winter temperature readings made at one station in non-insulated and insulated poultry houses indicate the value of such insulation. When the outside temperature ranged between 10 degrees above and 8 below zero, the inside temperature of a non-insulated house averaged 14 degrees and of an insulated house 24 degrees above zero. When the outside temperature was 6 to 8 degrees below zero, the temperature in the non-insulated house averaged one to two degrees below zero. This difference in favor of insulation may sometimes prevent a loss of winter egg production which might equal one season the entire cost of insulation. A system of ventilation is necessary to get profitable results from insulation. Shutting up the house during cold snaps to prevent a sudden drop, and opening of ventilators during sudden moderate weather conditions to prevent a quick rise within the laying house, both work toward maintaining the even temperature necessary for consistent egg production.

"HOTHOUSE" LAMBS
Hothouse lambs are one of the luxuries in the meat line and as such offer a tempting opportunity to the grower who can produce what the market requires at the time when most needed. Results during the last two seasons show that February is one of the best months in which to market hothouse or strictly milk-fed lambs.

WINTER MILK REDUCTION
For profitable winter milk production, I believe the following factors are essential, says a dairyman who has tried them all: (1.) Good to excellent cows. (2.) Skillful feeding and care. (3.) A succulent roughage—silage, mangels, a root crop or beet pulp. (4.) An unstinted water supply. If cows drink outdoors only once or twice a day, the water must be heated. Individual drinking bowls are the best system. (5.) Good quality hay, preferably legume. (6.) A grain ration containing at least three different grains fed according to milk production and varying in

Prices have been uniformly high throughout the month and the best lambs have sold in New York at that time for \$13 to \$15 each. Supplies increase in March and prices decline, but there is always a brisk demand at Easter and prices rise almost as high as in February. After Easter the market declines rapidly and during late April and May the market is usually so heavily supplied that only the very best bring profitable prices. Being a luxury product it is essential to produce only the best quality or none at all. Prices of the finest quality large hothouse lambs average two or three times the price of the poorest quality. The hothouse lambs are fall or early winter lambs that are strictly milk fed and this characteristic should show in the flesh. When dressed out they should have the light-colored flesh that denotes straight milk feeding. It is also absolutely essential that they be well fattened, for lightweight or thin lambs are discriminated against. The best weights are 30 pounds and up, although lamb weights 25 pounds are sometimes acceptable. Being a specialty product only a limited class of wholesale dealers are in a position to handle them for growers, and sales should be entrusted to a specialist or else arrangements should be made with high-class hotels or butchers to purchase direct.

GROUND ALFALFA FOR PIGS
At one experiment station, a protein supplement made up of two parts of tankage, one part of linseed or cottonseed meal and one part of ground alfalfa hay was found to be practically equal to a ration containing skim-milk for growing and fattening fall pigs. At another station, the use of ground alfalfa hay in the supplement gave considerably faster gains and lower cost gains than the use of tankage alone as a supplement. At another station, 20 per cent of ground alfalfa hay in the protein supplement resulted in this hay having a value of practically \$70 a ton for fall pigs; at still another station a similar supplement for fall pigs gave the ground alfalfa hay a feed replacement value of nearly \$80 a ton, while at another the feed replacement value of ground alfalfa hay in an experiment with fall pigs ran to \$100 a ton for this excellent protein, mineral, vitamin feed. In a number of groups of pigs fed recently the most economical gains were made by a lot with a supplement mixture of three parts of alfalfa hay, one part of ground alfalfa hay. It has been demonstrated recently that self-feeders give the best results in the feeding of this supplement mixture, and such a mixture can easily be made up on the farm. Home-grown alfalfa hay or other legume hays like clover or soybean of good quality, can be ground, and this supplement mixed at a cost of from \$2 to \$3 a ton, and from good quality, home-grown legume hay as valuable meal can be made as that obtained anywhere. At one station, excellent results were obtained with ground alfalfa hay for brood sows during the winter; a supplement mixture of three parts of ground alfalfa, one part of linseed meal and one part of tankage giving these results. At another, it was found that ground alfalfa fed to brood sows during the winter saved from one third to one quarter of the grain ration. These results indicate that alfalfa hay or other good quality legume hays can be ground and used as a part of the protein supplement for both pigs and sows during the winter, with the highest returns that can be obtained for this good crop in any way in which it may be sold.

CARE OF PELTS
As soon as possible after skinning, "cased" skins should be stretched on smooth boards having beveled edges, or on wire fur stretchers of which there are a number on the market. The advantage of a wire stretcher is this: After a skin is dried you can press the wire together and easily remove the skin. If a skin is stretched over a solid board and you leave it on the board too long, it may be hard to get off. Skins should be left on the boards until they are dry and do not wrinkle. Then they may be removed from the board and hung up away from mice, and where the air can circulate around them. They should not be laid close together. Do not overstretch skins, as the heavier and more dense the fur the better quality and better price you will receive. Remove all surplus fat and flesh from the skins after or before stretching, for if the fat is left on the skin, it is apt to become tainted during warm weather and the hair will come out under the spots of fat. After the skins are fleshed and stretched place them in a cool, dry place to dry, where they are protected from flies; never place them in the sun or near a fire. Packing furs for shipping is very important. After they are stretched and dried, do not roll them or fold them but place them in a bundle, perfectly flat, except larger skins such as bear, wolf or otter which frequently have to be folded to make a neat bundle. Never place one skin inside another as it is liable to be overlooked in grading. Put name and address on tag inside of each package, and sew pelts up securely in good sacks. Ship by express or parcel post. Never ship green or wet skins as they will become tainted in transit, and so be practically worthless. Ship to a reliable company—which does not always mean the one that quotes highest.

FIND THE CAUSE
An animal impoverished in flesh cannot grow or mature and it must be maintained at a loss of feed, interest on the money invested and time of the farmer.
total protein from 10 to 12 per cent with second cutting alfalfa to 24 per cent with timothy or other poor cow hay. (7.) Exercise in the open daily. (8.) Regularity in feeding and milking. (9.) At least fair stable conditions. Under present conditions more skillful and closer grain rationing of the milking herd is necessary than in the years just past. However, only cows capable of producing at least 9,000 pounds of milk or 300 pounds of fat should be kept anyway, and these and their better sisters are deserving of fairly liberal grain feeding.

New Spring Mode



Charming Joan Blondell, screen player, wearing a stunning formal afternoon creation in egg-shell and bottle-green crepe de Chine, with two outstanding features in brief bolero jacket and two-tone sash. A rhinestone and emerald clip marks the cowl neckline, so prevalent in the advanced Spring mode.

Stand Upheld



Mrs. Marion Kahn, of Brooklyn, N. Y., who refused to have babies. These results indicate that alfalfa hay or other good quality legume hays can be ground and used as a part of the protein supplement for both pigs and sows during the winter, with the highest returns that can be obtained for this good crop in any way in which it may be sold.

Tragic Play



Billy Senior, 12, was playing with his father's shotgun at home in Montclair, N. J. Suddenly it discharged. And slugs found their way into the chest of his sister, Constance (top), 6. She died. Now Billie sits dazed at the tragedy. Constance was in another room.

Inglorious Ending of a Glorious Flight



Believe-it-or-not this plane, bearer of a famous name, Southern Cross, Jr., has just set two new records. Flown by Guy Menzies, 21-year-old pilot of Sidney, Australia, it spanned the Tasman Sea, from Australia to New Zealand in the record time of 12 hours and 15 minutes. The other record is for the most unique landing, for the plane landed just as the picture shows—wrong side up. The pilot was uninjured.

Star Weds Director



Betty Compton (above), of the twinkling toes and the crooning voice, is now Mrs. Edward Dowling, it was learned when the couple sailed aboard the Orient, Havana-bound. Dowling is a dialogue director at the Paramount Pictures studio at Astoria, L. I.

Derby Winner



Seating a field which included the best men "mushers" in North America, Thula Geelan (above), voted dog team driver, won the Tahoe-Sierra, Calif. Dog Derby in the fast time of 5 hours 57 minutes and 34 seconds.

Princess Goes A-Wing



Seated in the cockpit of her plane, Princess Ileana, of Rumania, favors the camera with a pretty smile just before going up for an airplane lesson with Rumanian Air Corps officer.

Wins Trophy



In recognition of the mid-Winter aerial jaunt which Major Ralph Royce (above) led through the severe weather from Saifridge Field, Michigan, to Spokane, Washington, in January, 1930, he has been honored with the 1930 award of the Mackay Trophy.

Knighted by King



The day of the arrival of Captain Malcolm Campbell (above) to his native England was almost as thrilling to him as that of February 2, when he set a new automobile record on the ocean sands of Daytona Beach, Florida. The speed champ was informed by telegram that his achievement had won him knighthood.

Mercy Role



Bebe Daniels, leader of a Hollywood campaign to help the Red Cross help sufferers from the drought, takes personal charge of the first donations received.

Mother's Sacrifice



Arnold Schwartz, of New York, for whose life his mother gave her own, thrusting him from under the wheels of a truck hurtled onto the sidewalk by collision with an automobile.

Burning \$500,000 Is a Dopey Idea!



Peculiarly aromatic smoke went up from this bonfire on the city burning dumps on the Bayside Highway, California, when a half-million dollars' worth of assorted smoking pipes and other drug paraphernalia (representing a collection of more than two years) was confiscated by the State Narcotic Bureau.