C'NEILL FRONTIER

OF INTEREST TO FARMERS

CORNFIELD SCIENCE

When and how to harvest a crop af corn depends upon what use is to be made of it. Hogging off with shotes, using it for silage or husking for the ears may represent different economic considerations. If one has a berd of 75 to 100 peurod piec on hand economic considerations. If one has a herd of 75 to 100 pound pigs on hand and the corn or barley he is feed-ing them is worth a dollar a bushel and he is convinced that his grow-ing corn will not bring more than 75 cents per bushel at market time, he needs to know how much digest-ible matter he will sacrifice by turn-ing his pigs into the cornfield when the corn is in the hard-dough stage the crop is in the hard-dough stage. If one were not acquainted with the grop he might guess that there is mearly as much feed value in it when tasseled as there ever will be ance its total bulk does not increase materially. Some years ago a crop (prowing expert made a series of an-alyses of corn at different stages of maturity. He analyzed it when it was tasseling, when the silks were crying, when in the milk sage, when glazed and when fully ripe. His results were as follows: Pounds

Total dry matter per acre when Total dry matter per acre when silked

matter as when in the tassel, and sipe nearly five times as much dry matter. Starch is the material which constitutes the greatest increase of any of the substances. The fat alany of the substances. The fat al-so increases enough to represent a considerable added value. Peculi-arly enough, the crude fiber in-creases rather slowly after the tas-seling period. Disgestion trials of corn cut before and after the claring stars show a bicker damage glazing stage show a higher degree of digestibility after the glazing stage than before it. If corn is to be used for silage it is necessary to have about the amount of moisture which it contains at the glazing have about the amount of moisture which it contains at the glazing period and it seems wisc to harvest and ensile it at that stage of growth unless danger of frost or other un-toward condition may threaten. Frost may cause it to become too dry, and a loss of leaves from drying and crumbling will be the inevi-table result. table result.

table result. Pigs will thrive and make good gains in weight per day in corn that is in the colt-dough stage. In fact, it seems that young pigs almost in-variably do extra well on it. From the above table one can figure whether he can afford to turn pigs into the field at that stage of its into the field at that stage of its growth.

FINISHING TURKEYS

central idea of the scheme is to prove that there is a profit in crop growing as such, if rightly done, and with steady improvement in the productivity of the sandy soil which

goes to make up the land. Until the project gets fully under way when potatoes, cabbage, sugar beets, Jerusalem artichokes and other crops will be grown, chief de-pendence is placed on flax followed by sweet clover for seed and soil-improving purposes. Five sections of land are being sown to this crop each year, one complete set of equipeach year, one complete set of equip-ment being required for this crop-age of flax. Unit No. 1 of this equip-ment, consisting of a 40-foot disk-four standard 10-foot widths—a 40-foot spring-tooth harrow and a 40-foot corrugated roller, is run over the land twice, drawn by a 40 h. p. tractor, to prepare the seed bed. Unit No. 2, consisting of a 40-foot drill with grass seed attachment, followed by a harrow, is drawn by a 20 h. p. tractor. The third year a heavy self-seeded growth of sweet clover is plowed under and the land is summer-fallowed. This area is again seeded to flax or some other crop in the spring of the following year. year.

year. In a working day of 14 hours, 200 acres of land are prepared for seed-ing. Rainy weather does not stop the operation, since sandy soil is really improved physically by work-ing it wet. The 640 acres of a section are worked as one land of a sectral 10 acres not being plowed be-

tral 10 acres not being plowed be-cause of the inconvenience of turn-ing. It is, however, used for build-ings and and as a place for the erection of a windmill. Having put the farm on a paying basis without animals, he then ex-pects to proceed in introducing var-ious kinds of livestock for the ex-tra return which may be produced from these additional enterprises. The farm, however, must pay with-The farm, however, must pay with-out livestock. Cattle, hogs, ducks, geese, bees, rabbits and foxes are included in the final program when the entire scheme is put into operation.

POTATOES AS STOCK FOOD

A big crop of potatoes brings down the price. They are a perish-able commodity which cannot be carried over and disposed of another year. Prices are sometimes so low that the poorer and even the better grades may be disposed of as stock feed and the market value improved by thus decreasing the vis-ible supply. The value of potatoes as stock feed is not great and the price they bring as human food must be very low to allow the economic marketing of them as animal

feed. One experimenter has sum-marized the information on the feeding value of potatoes as follows: One bushel of No. 2 corn equals 4.5 bushels of potatoes, approxi-mately. One bushel of common barley equals 3.7 bushels of potatoes, approximately. One cushel of oats equals 2.1 bushels of potatoes, ap-proximately. One ton of corn sllage from mature corn equals 35 bushels of potatoes, approximately. One ton ly. One to of corn silage from immature corn equals 26 bushels of potatoes, approximately. Not more than 30 or 35 pounds of yotatoes, daily, should be fed to cows, as larger quantities may affect the quality of the butter, making it "salvy." Larger quantities may also cause digestive troubles, such as scours. For fattening cattle and sheep potatoes may furnish half of the dry matter of the rations, but only a quarter in the case of horses. Horses should not be fed more than 17 or 18 pounds of potatoes daily, as more may cause digestive troubles. Potatoes are best suited for feeding hogs when cooked or steamed. The water in which the potatoes are cooked is bitter and should be discarded. Do not feed more than four pounds of potatoes to one pound of grain. Raw potatoes for hogs have only about two-thirds the value of cooked potatoes. Chop or slice them on a root cutter to prevent choking your animals. Avoid unripe or sprouted potatoes unless the sprouts are removed. Potato sprouts are poisonous. Potatoes are low in protein and, therefore, should be fed along with feeds rich in protein. The above comparisons hold only when potatoes are used in properly balanced rations.



Mule Breaks Sterility Tradition; Has Two Colts and Grandchild

Washington .- "Old Beck" is only an ancient Texas "cotton mule" mare, who has been on this plant long enough to vote, but she has done her bit toward breaking the done her bit toward breaking the age-old reproach of sterility leveled at her hybrid race. For she has not only borne offspring—two lusty colts—but now has a grandchild, Science Service reports. For a mule to have a foal is an almost miracu-lous rarity, but for one of these to propagate is practically unheard of. A mule is the offspring of a thor-oughbred mare and a jackass. oughbred mare and a jackass.

Yet this is the record of "Old Beck," as detailed in the forthcom-ing issue of the Journal of Heredity by A. H. Groth of Texas A. and M. college. Her first offspring was a daughter, sired by a jack, and foaled in 1920. This feat brought her to the attention of the college authorithe attention of the college authorities, and she soon was given a home on the campus. Subsequent matings / second time

with other jacks failed to produce another colt, but a noted stallion of the college stud sired a foal that has grown up to look quite like a horse

-and a fine horse at that. "Old Beck's" mule daughter remained without issue in spite of several attempts to breed her, but the horselike colt, a stallion, has sired one healthy colt, now over a year old.

Mr. Groth says of him: "He has developed into a nicely balanced horse of saddle type. . . . He per-forms well under saddle and is possessed of remarkable intelligence.

sessed of remarkable intelligence. The only mule characteristic which he shows is his dislike for crossing a ditch or stream." In the same issue of the Journal of Heredity. Erasmus Haworth of Lawrence, Kan., records another case of a mule mare producing a foal sired by a jack. The same mule is now believed to be with faal a is now believed to be with feal a

other than to ask for more. Today especially at the noon hour, a spirit of unrest prevails in the eating-houses. The ambition is still to eat and run. When philosophers or doctors suggest that this custom is responsible for ills spiritual ar well as physical, the addicts pay no attention

It would not be surprising if, both here and in France, the final de-cision would be determined only af-ter communion with the muse Gas-terea, so often invoked by the great French gournet Brillat-Savarin. In the early days of the republic, hotel and boarding house cooking in this country did not invite slow and delectable eating. In France, even the restaurants which cater to foreigners pride themselves on the perfection of their dishes. Puritans, may denounce this appeal to the in-It would not be surprising if, both may denounce this appeal to the inner man as demoralizing. But once effectively made it is seductive. So long as the French cooks produce delicious food the French people will linger at the table. If Ameri-can cooking continues to improve as it has during the last few de-cades Americans will graduating



vention

We now have with us the common cold—and all its complications. Its arrival at this time of the year is as

arrival at this time of the year is as certain as its cause is mysterious. A disheartening state of affairs! What can we do about it? How can we prevent colds? "That," says Dr. George H. Bige-low, Massachusetts's public health commissioner, "is still more or less of an unsolved problem. The cause of colds is thus far unknown, but there are certain rules of health that go far in prevention of the disease." disease

First of all, the commissioner points out, keep away from the person who has a cold. Avoid the

cougher and sneezer. Never kiss on the mouth. Do not use a common towel or drinking cup. Do not borrow any-one's handkerchief. Keep the fin-gers away from the nose and

one's handkerchief. Keep the fin-gers away from the nose and mouth. Special precautions can be taken by avoiding dry, overheated rooms, which predispose to colds. Pans of water should be placed on the radia-tors to supply moisture. Fresh air is the best of tonics, the commissioner further advises, and exercise goes a long way toward keepinig you fit. Dress for the weather! Too many clothes are as bad as not enough. Be careful of your food. Contrary to the usual belief, it is dangerous to stuff a cold, Dr. Bigelow says. People who overeat are more apt to catch cold. Daily bowel movements are essential to good health; they help to ward off colds. It is the advice of Dr. Bigelow to go to bed at once and call a doctor if you feel hot or chilly or have pains in your eyes at this time of the year. Prevention is better than cure.

cure

Wash your hands frequently and always before eating. Avoid crowds when the disease is prevalent. Walk to work as much as possible. Get all the sunlight you can

In general, keep fit by going to bed early and refraining from getting overtired. Be sure the room where you are is always well ventilated. Drink plenty of water. Exercise outdoors.

Paper Matches

Mr. Robert M. Coates, writing in the current New Yorker, calls atten-tion to a crisis that has arisen with regard to paper matches. With ev-ery package of cigarets, he points out, you receive a folder of match-es; and while there are exactly 20 cigarets in the package and exactly, 20 matches in the folder, the cig-

A turkey flock on free range that cas become accustomed to eating grain should have a fattening mash idded to the ration for from two to three weeks before marketing. Birds so fed will gain two or more pounds in 10 to 14 days. There are two methods: The first is to shut the turkeys up on a limited number of acres. not exceeding five or six. These runs should be preferably fields of growing grain or land covered with green growing plants. The turkeys are fed all the grain they will eat and, in addition, are given two feeds daily of moist fattening mash. This mash may be the ordinary commercial fattening mash or a mixture of 60 pounds of yellow corn meal, 20 of wheat middlings, 9 of ground oats 10 of meat scrap and 1 pound of salt. This mash is mois-tened, preferably with milk though water gives good results where milk is not available. We have had best results says an expert grower, where we have fed the mash moist but not sloppy, as the sloppy mash did not seem to be as palatable. See that the mash is cleaned up at each feeding. It usually is wise to feed a small quantity the first and second feeding; then rapidly increase the allowance till the flock is getting all it will clean up. The sec-ond plan is to leave the turkeys on free range, but to give them a feeding of wet mash the first thing in the morning, following it with a feeding of grain, so that the turkeys will be satisfied and not range far. A second feeding of wet mash given about 2 or 3 o'clock, all that the birds will eat, and this is followed just before roosting time by a heavy feeding of grain. Clean wais always available. Turkeys fed in this way do not range much. but increase in weight rapidly. Such birds should be carried to market, not driven, as they are soft and lose weight rapidly when driven any distance. Turkeys fed in either of these ways will make greater gains in weight much more quickly than if the range birds are closely con-Tined.

STACKLESS FARMING

The livestock system of farming has long had its loyal advocates, who have contended that no other system is feasible or possible. In fact, until a few years ago livestock of several kinds had to be kept on every farm, if for no other reason than to supply the necessary power and to provide milk, meat and eggs

for the family. However, under present conditions with tractors large and small, and a variety of other means of getting around the necessity of keeping livestock on every farm, it is strange that more men have not given consideration to certain advantages in a farming-without-livestock system. This is what one western farmer is doing on a 16-section farm. Not a horse on the place. No cattle, hogs. sheep or poultry or even bees. The

JUST A REMINDER

In transplanting any vegetable plants let it be done in the evening possible. Press the soil firmly about the roots and water well. If after the water disappears dry earth is covered over the wet it will prevent baking of the soil about the oots when the sun comes out next day.

KEEP HOGS CLEAN

When the hogs are confined keep the floors of the pen as free from dust as possible. Hogs lie with their noses close to the floor and in this way inhale more dust than any other farm animal.

CREAM VS. WHOLE MILK

Dairymen generally believe that the choicest market for them is one in which they can sell whole milk rather than cream.

It is true that milk checks from a dairy herd are larger than cream checks from the same herd. Certainly the man who is fortunately located to take advantage of a good milk market must avail himself of the opportunity, but our observations are that in the long run most midwestern farmers will do better in selling cream than whole milk. The man who sells whole milk loses important advantages that are found in skim milk. He has difficulty in raising his calves. No entirely satisfactory substitute for skim milk in calf raising has yet been devised; the dairyman who is unsuccessful in raising calves can-not improve his herd year after year.

The man who sells cream can also utilize his skim milk effectively in raising hogs and poultry. This permits him to diversify while the whole milk market encourages dependence upon one product. The dairyman selling whole milk is somewhat comparable to the cotton farmer of the south or the wheat farmer of the northwest. He is a one-crop farmer and is liable to some of the misfortunes characteristic of that kind of farming.

PREVENTION BEATS CURE

If animals are properly cared for a large share of disease troubles will be eliminated. Improper feeding is probably the biggest factor in lowering the resistance of animals.

TESTING WILL HELP

If the man who causes two blades of grass to grow where one grew before is to be called blessed, the same thing should be said of the man who improves his dairy herd until it produces twice as much butter as it did before he began with

GOOD WINTER JOB

Lima ceans, melons and other tender vegetables may be advanced two or three weeks by starting them in pots or bits of inverted sod in a hotbed. When the weather becomes warm enough transplant without disturbing the roots.

AUTUMN

(Dedicated to Mr. E. A. Burgess, who died September 26, 1928.) Dead is the golden summer! And its laughing blue

Of sky o'ercast in leaden grief. The trees, bereft Of happy leaf, stand guard; the

wind, a requiem; The autumn haze, a hovering in-

cense steeped in prayer.

O summer to my life-you!-Captain always of Your soul: in which were seated

culture. joyousness Affection, honesty, devotion to a

cause Or friend: a generous understand-ing of th' affairs

Of men and men themselves. What-

ever your belief. Still tolerant of others and their faith; and kind

And courteous of deed-and in adversity

Courageous sure. Your life was on th' Arcadian heights

And drew up thither lesser souls-O man of men!

And now th' summer's spent. Tears idiy fall, and grief

Is coniforted by memory. God rest you, friend!

-Contributed.

Keep Sense of Justice Alert.

from the Des Moines Register. The Outlook does not reach any particularly new conclusion in the Sacco-Vanzetti case when it finds that Vanzetti was almost certainly innocent of the Bridgewater holdup. But its evidence is new, and it is overwhelming.

Few people ever believed that the trial in which Vanzetti was convicted of the Bridgewater holdup was a fair inquiry into the He was incompetently defended, and he was not allowed by his counsel to take the stand himself. The explanation was later made that had he gone on the stand the prejudice against immi-grants and radicals at that time would have blinded the jury to his real defense.

Perhaps this was true. At any rate when he did take the witness stand, in the trial for the Braintree murders, these prejudicas were used by the prosecution in such a way as to change the issues entirely from guilt and innocence to patriotand radicalism. And the Bridgewater conviction was used against him.

The strange fact about the whole Sacco-Vanzetti case is that the state police of Massachusetts, the men who dealt with crime there day in and day out, never believed either man was guilty of either crime. The police recognized both crimes as the work of profession-

Record Building New York .- A nine story apartment building, 100 by 100 feet, was completed here several weeks ago in less than three and one-half months from the time excavating was started. This is believed to be a record in construction work.

From Pathfinder.

Lady (at fashionable ball)-Do you know that ugly man sitting opposite to us? Partner-That is my brother,

madam. Lady (in confusion)-Ah! I heg your pardon. I had not noticed the

resemblance.

al highwaymen, and the accuse men were never in any kind of trouble before and they were never connected with any professional

criminals. The Outlook is not a radical magazine, by any means. Yet it is interested in settling the question of whether justice was done or not. And it is tremendously important that it be settled. Those who were stiff-necked about the execution of the men, who insisted that they must die because they were legally and technically convicted, who said that they were anarchists and were not therefore entitled to the protection of the courts, who declared that they ought to be put out of the way because they were disturbers, will be annoyed in their complacent belief that because the men are dead the doubt about justice is quieted.

If Sacco and Vanzetti are final-ly established to have been innocent to the satisfaction of all who are open minded about the case and all these are now uncertain about their guilt, it will make harder if not impossible such arbitrary insistence upon extreme pen alties in such cases in the future.

Lunch Period Issue. From New York Times.

Despite the political tumult and the shouting on this side of the Atlantic the people of Europe are able to consider other-and perhaps graver-problems. In London and Paris a heated discussion is now in progress whether the two-hour lunch period is better than one hour or less. In France, opinion is sharply divided The conservatives denounce the curtailment of the lunch hour as an alien subversion of historic custom. Some blame England, others America, for introducing the shorter period. Liberals, on the other hand, insist that the shorter hour is less wasteful of human effort and permits workers to return home earlier in the evening. They invoke the great deity efficiency. A few likewise appeal to the goddess Hygeia, and insist that it is better to abandon the tradi-tional cafe-au-lait which represents breakfast to the French nation in favor of the English or American meal, and thus curtail the quantity consumed at luncheon.

Here in America the tendency is in the opposite direction-not without reason. What induces so many Americans to take their meals on the run has never been satisfactorily explained. The custom was remarked upon by foreign travelers more than a century ago. At different periods they have noted the American habit of trooping into dining halls, eating as rapidly as possible, often going through an entire meal without saying a word

WORLD SHOW IN 1929

Next year's automobile show at New York may see many European cars alongside the American products. This will result if a formal offer to show their products, made by the show management, is accepted by the foreign makers.

Q. Is there a farm in connec-tion with the Atlantic Penitentiary? F. C.

A farm is owned by the Federal Penitentiary at Atlanta, Geo. It contains 2.500 acres and the prison-ers are able to raise vegetables and other crops for the use of the institution.

Americans will abandon their eat-and-run ha"'s.

Lucky Inventions. From the Pathfinder.

"Accident is the mother of invention 99 times out of 100," says Louis Brennan, torpedo inventor. Observing the behavior of a frayed driving belt on a planing machine he saw that it was possible to make a machine travel forward by pull-ing it backward. The invention of the torpedo resulted.

Workmen in a paper mill care-lessly omitted to add any size to the pulp and the result was a parcel of paper that was thrown aside as waste. Someone tried to use this waste to write a note and discovered its absorbent character. Blotting paper then came into existence. Daguerre carelessly laid down a silver spoon upon a plate that had been treated with iodine. He noticed that the image of the spoon was retained and from the experience evolved the idea of the silver coated photograph plate.

The cash register was devised as a result of observing an automatic indicator of a steamboat propeller shaft's revolutions. The pneumatic thre was suggested by the tying of a piece of water piping around the wheel of a wheelbarrow.

During a certain process in the breaking up of silver nitrate two well known scientists observed that the wire by which electricity was being conducted became coated with silver. The invention of silver plating resulted.

When one man's wife had trouble keeping refractory hairpins in place the husband twisted one and solved the problem. A pot of brine boiled over and where the brine ran the pot was glazed pottery.

A piece of cheese tossed by a workman dropped into the plating bat, used in producing copper disks from which wax phonograph records were stamped. The disks from that bath were found to be far superior to the others. Investigation revealed that the cassin in the cheese had done the work.

A French scientist while experimenting inadvertently opened the wrong valve. Several drops of moisture settled in a glass tube and the scientist thus accidentally discovered liquid oxygen.

NEW BUILDING PRODUCT

Stockholm. (UP)-A new building material made from sawdust and saw mill waste products has just been developed in Sweden at Nordmaling in the northern province of Vesterbotten. The material thu obtained is pressed into hard bricks of great strength and durability and it is claimed that it will be of considerable importance to the building

Atlanta.-The senior member of the Atlanta Journal composing room has a new boast for the world to worry about. When he wants to see, other than reading, he takes off his glasses and when he eats he takes out his false teeth.

Q. Is zircon a diamond? C. H. K.

A. Zircon is not a diamond; it is a zirconium silicate. The diamond is a crystallized form of carbon. In this country zircon is found in Colorado, Idaho, New Jersey, New York, North Carolina, Oklahoma, Oregon, Virginia and Washington.

arets are always used up faster than the matches. Thus, as a result of many emptyings of pockets before sending your suits to the presser, there is always a dreadful pile of half used folders somewhere about the house, and per corollary, there is always a domestic situation that

is anything but pleasant. Mr. Coates does not attempt to explain these facts, either as to why the matches last longer than the cigarets or as to why the average citizen fails to throw them away. So we hasten to assist him. The matches last longer than the cigarmatches last longer than the cigar-ets because two or more cigarets are frequently lit off one match, or off the flame of somebody who has a lighter. And the average citizen fails to throw his half-used folders away, because he is conscientious about not causing a fire. Just as he lets old razor blades accumulate lest one of them, unseen in a wastebasket, slice off the thumb of an old family retainer, he lets paper matches accumulate lest one of them, coming in contact with a stray spark, cause a fire that will cost the insurance companies a lot of money. Thus do modern ideals make boob ies of us all, and presently the whole population will have to rent extra rooms to store the rubbish that we are too considerate to get rid of.

What to do about it we have no idea. We hesitate to urge any plan that might result either in a higher thumb loss or a lower insurance profit. Perhaps the best thing would be to incorporate the American Anti-Match and Razor Blade Association, with Mr. Coates as president, and direct it to study the whole problem exhaustively, to the end that a workable solution may be arrived at.

THIS HILL. October.

Come on, fellows, Hello, Jim. Naw, I ain't gonna wait for him, Got your lessons? Huh! Good Lord-

Hold your breath-we're startin' the Ford.

Hey, you, push 'er. Now then, pull!

Yeh, the running board is full. Shake 'er. Crank 'er. (Snuffle and snort.)

Guess the gas supply is short. Wonder if she ever will-Hold 'er!-Make it up this hill. Hey, there! Keep 'er off that glass. .

Now we gotta walk to class. -H. R. H.

Q. Who first used the expression, companionate marriage? G. E. R. It is thought that the term, companionate marriage, was first employed by Dr. Knight of Barnard college in an article published in 1924.

The One Above

Weekly Scotsman One day Mrs. Gladstone was discussing with some ladies a knotty problem, while her husband was upstairs busy in his study.

As the discussion proceeded, one of the ladies exclaimed with a sigh. "Well, there's one above who knows it all.

"Yes," said Mrs. Gladstone, "William will be down in a minute, and he will tell us all about it."

New Income Tax Point-Headline. No matter. It doesn't point at us.

industry. Yes, But Why?

