

# Efficient Farming

## CHEATING THE OLD SCRAP PILE

Few farms, indeed, have no graveyard for old machinery and parts. A passerby, familiar with factory methods, wonders at the dismantled wrecks of mowing machines, once resplendent in shining red and yellow paint, now rusting in a slump of burdock and brambles. Perhaps all that is wrong is a broken axle. A crippled tedder, that might still be kicking out the long windrows of hay in the low meadow on July mornings but for a stripped and toothless gear, and a bent camshaft, disconsolately forms a rusty trolleys for wild morning glories.

Dozens of smaller parts are always there, too. A flywheel from the threshing machine, with a chunk missing from the rim. A broken pump handle. Cracked transmission housing from the tractor—how long was the spring plowing delayed while the tractor was laid up waiting for the new one to come in? Plowpoints, dozens of them; and half a hundred small wheels, gears and pinions. Parts from the car and the trucks. Harvester parts, cultivator parts, parts from the gas engine, and windmill—no one could name them all.

Such a scrap pile nearly always is to be found on the best managed farms as well as those run by the old methods. In fact, the better equipped the farm, the larger is likely to be the heap of discarded metal parts. Modern machinery converts the up-to-date farm into a well ordered manufacturing plant. This situation is followed by the manufacturing plant's problem—the maintenance and repair of machinery.

Besides the fact that it is an unsightly heap of junk, possibly even dangerous to children and to live stock, a haven for field mice and a possible fire hazard from the tall dry stalks of the over-growing weeds, what does this scrap pile mean? What significance has it to the owner of the place?

It is a monument to waste. Every piece on the scrap pile has had to be replaced. From the mower to the smallest sprocket every item was once important and necessary, and when thrown away a new part had to be bought so work could go on.

Industrial plants, faced with the same problem, would weld these impaired parts. Many scrap piles representing thousands of dollars in machinery have been wiped out; never to reappear, and the salvaged parts not immediately required have in many instances formed a reserve supply to be drawn upon as needed. The savings made in these plants have justified the investment in welding equipment many times over.

However, to reclaim worn or broken farm equipment it is not necessary for

the farmer to buy welding apparatus. The nearest job welding shop will fix it for him.

With the oxy-acetylene welding blowpipe in the hands of a competent operator all sorts of worn and broken parts can be repaired—more than "repaired" in the ordinary sense of the word—actually made as good as new. Cracked castings can be welded, missing gear teeth replaced, worn sections and surfaces built up. Malleable castings can be brazed, and the part will be as strong as originally. Steel parts can be made over; plowpoints built up with an alloy steel welding rod will give service like new ones. Bent shafting can be straightened easily by heating with the welding blowpipe.

New parts and new equipment can also be fabricated by welding. One stock farm bought a number of old hot water tanks (range boilers) from a junk dealer, cut them into halves with a cutting blowpipe, and after welding pieces of old pipe to them for legs, used them for stock-feeding troughs. On another place a chute for bags of grain was made by welding old pieces of steel sheet, bought very cheaply from a scrap yard.

It is in the repair of damaged parts, however, that the greatest savings can be made. The actual savings in dollars and cents is a large figure, but the greatest saving is the time necessary to secure a new part.

Take, for example, a typical instance. There are ten acres to be plowed for fall wheat. Disc-harrowing will not do, the ground must be turned over. The first morning an accident to the tractor put it out of service with a crack in the cylinder block.

A new block can be obtained only from the factory, and this will take weeks. Added to the cost of the new block is the freight or express and, unless the work can be properly done on the farm the cost of installing the new block. In the meantime the plowing waits, unless a man and a team of horses can be put to it.

Welding will do away with nearly all of this delay, and much of the expense. The cracked block is simply removed from the tractor and taken to the nearest welding shop. There it is carefully preheated, the crack welded and the casting slowly cooled—all of this work will not take a day. And the results are very much worth while. The scrap pile is cheated. The cost of a new cylinder block is saved. But best of all, the plowing can go right ahead.

This incident is but a sketchy illustration of the possible value of welding on the farm. Hundreds of similar instances might be cited of savings that are now being made, or that could be made were the value of this reclamation process known to all who could take advantage of it.

# Poultry

Until a few years ago I believed that corn is a mighty poor feed for young pullets, especially just before they are to be placed in winter quarters. That fall, however, it was a case of "corn or no grain" as I was unable to procure anything better at prices that I could afford to pay. Accordingly I began, somewhat reluctantly, to feed corn to the flock of pullets from which I hoped to select my winter layers.

A neighbor, far more experienced in poultrycraft than I, declared that the fowls would accumulate so much fat that they would be worthless for anything but market purposes by the time cold weather began. But I was desperate and concluded to give corn a trial.

The pullets were on an extensive range at the time. In November they were placed in winter quarters, and from that time forth I realized that a more balanced ration should be provided and began feeding a commercial scratch feed. To the astonishment of myself and neighbor, these pullets began laying in December and kept us in fresh eggs during the balance of the winter; and not a single pullet went into molt.

Some months later I happened to mention the matter to a poultry expert. He merely laughed and replied, "Nothing remarkable about that." In fact, I always make it a rule to feed corn to my free-range pullets as soon as the extremely hot weather is past; and I continue to feed it liberally until the fowls are placed in winter quarters. By such a system the pullets put on sufficient flesh to begin winter laying without experiencing a loss of vitality, and thereby escape the winter molt.

"As long as the young stock is on free range there will be plenty of bugs, worms, weed-seeds and waste grains about to balance all the corn they will consume, and it is almost impossible at that period to induce them to eat more of it than is good for them. The time to cut down on corn in the poultry ration is when the flock is confined to close quarters where the birds can not get sufficient exercise."

## We Bought Fall Pullets.

We made \$244.38 net labor income last year by buying pullets in the fall and breeding them for eggs. The careful accounts we kept convince me that under similar conditions we would do the same again.

A purchase of additional land left us with an empty laying house that I wanted to use. So I read the classified ads in the nearby papers, and started out with some coops. We bought five dozen early Brown Leghorn hens at 75 cents; 50 pullets (12 miles farther on) at \$1 a head; another four dozen at 20 cents a pound; and later 30 Leghorns at \$1.25 each. Our chief problem was not the price, but to get pullets old enough to begin laying soon.

The average cost of these pullets and hens was 90 cents. We soon culled the flock down to 150 head. The November egg yield was 15 per cent. This we thought good considering that a lot of the birds decided to do some moulting, that their rations and homes were abruptly changed, and that their house was being remodeled.

In December the yield still stood around 15 per cent, but in January it began to climb, and in February reached 42 per cent. April was the highest month with 66 per cent. After that the flock average continued to drop off until late in August it was only 20 per cent.

Our own pullets were coming into maturity, so early in September we sold the entire purchased flock to make room for them. We got 12 and 14 cents a pound, selling on an average for 23 cents less a head than we had paid ten months before.

Our accounts show that the 150 birds had returned a profit, over cost of feed, of \$278.88, or \$244.38 after deducting the \$34.50 loss in selling price. That was our net labor income. Considering that the flock was picked up here and there and consisted of birds with no special egg breeding, with many of them immature, we feel that the investment paid well. I also believe that there is a field in each neighborhood for someone to grow pullets for sale. They should be hatched so as to begin laying by November 1st, should be advertised, and sold at a fair price. As a matter of fact, we bought ours as cheaply as we could have raised them.

## Seed Ears.

The corn seed ears are best selected from the standing plant. For those that neglected to do this, the next best practice is to select the best ears at the time of husking. Good seed corn will in all probability be scarce in this province next spring, so every real good seed type ear should be carefully saved. After husking, the seed ears should be kept in a place of storage that provides a uniform temperature, good air circulation and freedom from moisture.

Every rural community would profit by an inventory of its production farm by farm, family by family. Further, the school children would profit, highly through the gathering of the material of such an inventory.

## The Springtime Route

The Cruise embarks from New York Proceeds Eastward following Springtime round the World. Returns via Hawaii, Victoria, B. C., Vancouver, B. C., San Francisco, Panama Canal, Havana to New York.



Each Gateway Port has its charms, too. India's are famous for jewelry, cashmere shawls, ivory. Java's for batik. Peking for silks, furs, jades. Buying these treasures is a sport, showing them a triumph.



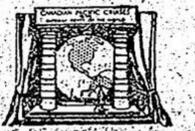
53 days for shore explorations.



Luncheons, receptions and dances at the shore stops. And always, the most celebrated hotels, the best orchestras.



The cruise will cost no more per week than staying anchored in any shore resort or hotel of comparable luxury.



Life aboard ship will be a la coterie club. Deck sports, plunge, night dances, entertainments, lectures.

## FOR HOME AND COUNTRY

### News from the Algoma and St. Joseph Island institutes.

The Institutes Branches of Algoma and St. Joseph's Island have in general excellently planned and executed monthly program put on by the members and local talent. The reflex effect on the girls and women is noticeable. They are especially bright, efficient, and clear-visioned, carrying their working principle of co-operation from the individual to the Institute, schools, county, college, and Government.

St. Joseph's Island, in co-operation with the Red Cross Society and Council, is establishing a hospital at Richard's Landing. The Island Institutes are co-operating to furnish it and render all help possible in other ways. Good health in home and community is a study of intense interest in the north.

Espanola members volunteered to help the doctor and nurse with a baby clinic, gave a donation to the Children's Aid and Muskoka Sanatorium, encouraged the young people to put on a play, and helped needy local families.

Gordon Lake had an apron-making contest and are arranging for a Girls' Garment Making Club. Richard's Landing are devoting their energies to the new hospital.

Dayton did, as community work, quilting and mending for the neighbors, darned socks for the bachelors, held a box social to add to their funds and neighborhood good times, and made a donation to the hospital. They also lent a helping hand to the School Fair by giving a prize for the best collection of wood leaves.

Bruce held a tag day for a blind man, had a Dressmaking Course for their own improvement, looked after the sick and helped the Children's Shelter. Waiford had a fine community spirit among their forty-five members, each one taking an active part in a well-planned program. They are making ready for a healthful winter by packing hot lunches in two of their schools and taking the Short Course in First Aid and Home Nursing themselves. Cemetery beautification is one of their local improvement activities.

Spanish, a baby branch, is already active in home and neighborhood improvement planning a basketball equipment for the school children. Hiiton Beach reports: "After Prohibition carried, we had no more need of a jail. So we turned it into a public library and one-half of all we earn goes to its support, the rest to our monument fund. We have been very energetic educationally, having had a



## Romance Again for a Wonderful Girl

Somewhere is a girl. College has recently said reluctant goodbye. Society has adopted her. Summer playlands adore her. There's only one more Winter under daddy's wing, and he wants to make it glow with the grandest adventure of all.

Java, Sumatra,—laughing isles of the laughing seas. Home by way of the Orient, so colorful, so fascinating. What thrills! What joys! What incomparable broadening!

And everywhere the long arm of the Canadian Pacific will follow,—guiding, providing,—protecting, conducting.

All experienced travelers are keen about the Empress of France. Lord Renfrew (the Prince of Wales) chose her twice for voyages. She is a greyhound for speed, a private yacht for appointments.

That is this cruise extraordinary. Sailing on a great Empress to the Gateway Ports of all the World. First into those of the Mediterranean, each a gateway to some ancient culture, some romantic country. Down thru the Holy Land into Egypt. Over India,—mystic India. Exploring Ceylon.

January 14th from New York is the sailing date. But the time to make arrangements is now.

Fascinating Planning Literature tells about the Five Features Extraordinary. Covers every other detail. Write, phone, or call for it.

Personal Service Representative will call, if desired, on request.

J. E. Parker, Genl. Agent, Pass. Dept. 1 King St. East, Toronto

## CRUISE Round-the-World Canadian Pacific

# The Dairy

The dairyman should know: That timothy hay lacks protein, is not very palatable to the dairy cow, and has a constipating effect.

That, when combined with alfalfa hay, a limited amount of good corn fodder is, pound for pound, worth as much as alfalfa hay.

That a good rule to follow in feeding corn silage is to give each cow three pounds of silage and one pound of dry roughage per day for each 100 pounds of live weight.

That there is no advantage gained in removing the ears of corn from the plant before putting the crop into the silo.

That a heavy ration of potatoes gives milk of inferior flavor, and butter that is salty; but that the potatoes can be satisfactorily used in moderate quantities if fed when cooked, and in still smaller quantities when raw.

That profits depend upon providing an abundance of succulent, palatable feed in a well balanced mixture which is fed under comfortable quarters that admit of a reasonable amount of exercise for the cows.

That cows will not thrive unless they receive a regular supply of salt, at least a daily allowance of an ounce for each cow.

That, other things being equal, cows return the largest profits when their owner, through his kindness has gained at least a portion of the affection that these cows would naturally give their offspring.

## I Put My Farm Name on My Mail-Box.

It is now about three years since I purchased my farm. About the first thing I did after building a house was to set up a mail-box with an attractive, short farm name printed neatly on its sides with my name beneath. I never saw a more pleased expression upon the face of a person than appeared upon the features of our mail-carrier who came along just as I had finished nailing the box on the post. "By golly," he said, "you've got the right idea. You're the first man in here to give his place a name, but it means a lot to me as well as to you. If all the farmers would get busy and do the same, it would speed up mail delivery nearly 50 per cent."

"Well," I replied, "I hadn't thought of it in that light but I wanted a way of letting people know where I lived."

"Well," they'll know where your farm is before they know you," he said, as he left.

I watched him until he turned the corner, and thought of what he had said. If they knew where my place was, in time they would get to know me and my name would be linked inseparably with the name of my place, and this in the long run would be good advertising.

Now it is getting so that when any of the dealers in our town make my acquaintance, they say, "Oh! Are you the fellow that lives in 'Northaven'?" and want to know what I intend to raise on the farm. So taken-as-a-whole I feel that the 10 cents I spent for paint to put my farm name on the mail-box has been a good investment.—H. O. Hall.

## Fattening Cockerels.

For crabs feeding, cockerels give best results when they are put into the crates at from four to five pounds in weight, according to experiments carried on under the direction of the Dominion Poultry Husbandman. They stand the confinement and forced feeding better than younger birds. It is recommended that they be fasted for practically the whole of the first day and then fed sparingly for several days. If fed heavily from the beginning, the birds go off their appetite and lose rather than gain in flesh. After the few days of feeding sparingly the birds will soon be able to handle two or three full meals in the twenty-four hours. During long days, or when artificial light is used, suitable feeding hours are six in the morning, at noon, and six in the evening. Two feeds are sufficient in the shorter days; at morning and evening. The duration of the feeding period varies from two to four weeks, which should terminate when the birds have become well fleshed and are noticed not to be eating well. Whole grain should not be given, and the finer the grain is, ground the better feed it makes, and may consist of a mixture of corn, oats, barley, buckwheat, or wheat. The feed should be given in a wet state mixed to the consistency of porridge, so that it can be poured from a pail or dipped with a flat ladle. Buttermilk is regarded as the best liquid, skim milk coming next. Better results are obtained when the milk is sour and the feed-mixed one meal ahead. A little salt added to the mash is recommended. The birds should have water constantly available, and a supply of grit at all times.

and an electric stove. The April meeting is a regular school treat meeting when prizes and a treat to the pupils come from the visiting Women's Institute.

Iron Bridge put in a telephone for their nurse, cleaned up the cemetery, helped the School Fair, and attended to some needy members of the community.



## Betty and the Fairy.

Once upon a time not so very long ago there lived on an 80-acre farm a family of four. Their names were Jack, Betty, Betty Brown and Mr. and Mrs. Brown. Jack was a boy of eleven and was very fond of fun. Betty was a quiet child two years Jack's junior and she believed in fairies.

One day Mrs. Brown told Betty to go to the orchard after some apples. Betty was very fond of apple pie so she went gladly. When she got to the apple tree she said, "Oh, I wish the apples would come down to me so I wouldn't have to climb the tree!"

A high, small voice (very much like Jack's) answered, "If that is all you wish, little girl, I will gladly help you, for I am a fairy."

Betty cried with joy, "Oh, may I come up and talk to you, Fairy?"

The high voice tried to be alarmed, but it was a very bad attempt. "Oh, no, no, no, little girl! You mustn't for I would fly away!"

Betty asked several questions which the fairy wouldn't answer. That night at supper when they ate their pie, Betty told of her adventure. Now why do you suppose Jack had to get a drink so suddenly?

A fairly heavy cut of lumber in New Brunswick during the coming season is indicated in sealers' reports to the Dept. of Lands and Mines. Sawing during the past summer has depleted stocks, and the supply of sawlogs will have to be replenished for next summer's operations.

A total of 93,250 pounds of wool, representing the output of 162 wool growers who belong to the Alberta Sheep Breeders' Association during 1923, was sold through the Canadian Co-operative Wool Growers' Association for \$29,782.47. Last year the wool sold for 113 members averaged 75,698 lbs. having been sold for \$17,652.