

# Do You Pay Your Man for His Time, or for the Work He Does?

By H. Z. Francis

Despite our improved machinery, there are some operations on nearly every farm which are still done entirely by hand, and which will be done for years to come. Are you doing those hand operations as cheaply and quickly as you can?

Think of the work required to shock your wheat and oats and barley every summer, of the men who spend a month every fall husking corn, the time spent in picking and sorting and packing your apples. Cutting corn by hand, picking up potatoes, hand-work on sugar beets each take many, many days of labor each year. No satisfactory machines have ever been invented for some of these jobs.

As a rule, I find there is more time and energy wasted on handwork, whether done by the farmer or the hired man, than there is on work done by implements and machinery. At least, many of us could save some of our own time and money by planning such work more carefully and sticking to the plan.

The fact that corn-husking is usually paid for by the bushel is largely responsible for this being one of the most efficient hand operations in the entire country. I venture to say that on the whole less time is lost and energy wasted in husking corn from the standing stalks than in any other hand operation on the farm. The men put in full days, keep busy all the time, and do not often stop even to talk to each other.

Furnishing each man with a team and wagon, so that he works by himself, also helps to get more corn in the crib. On any job, there is nearly always a certain amount of loss when two or more men work together. They get in each other's way, the faster workers have to wait for or help out the slower ones, and there is often a general lack of co-ordination all around.

### Put Pay on Piece Work.

It is a mistake to think that efficient work always means hard work. Of course, if one expects to do a full day's work he cannot rest too often or too long, but in the actual doing of the work the best way is really the easiest way, provided the quality of the work is kept up to standard. The great trouble in inducing hired help to use efficient methods is that they often do not realize this fact. If you ask a man to use a method which will increase his output in any way, even though it is not accompanied by any increased expenditure of energy, he generally thinks you are trying to make him work harder.

If you hire a man by the day or hour, and he knows that he will be discharged as soon as the job is finished, the only way by which he can gain anything is by making the work last as long as possible. Then, too, it is hard for a hired man to see why he should try to do a full day's work, provided he stays in the field all day.

Such troubles with hired help are done away with when pay is placed on a piece-work basis. My observations have been that work paid for by the piece is nearly always more efficient and economically done than that paid for on a time basis.

When pay depends on the amount of work actually done, the hired man has an incentive to do as much as he can, and you are relieved of the necessity of closely supervising his work. It enables good workers to draw better pay, and automatically weeds out the lazy, slow-moving ones, or at least materially reduces their wages. The only possible objection from the farmer's standpoint to this method of payment is that the worker in his desire to accomplish the maximum may not do as high-class work as he otherwise would. But which is the greater evil?

Why can't all handwork be done as efficiently as corn-husking? In cutting down corn by hand, a great deal of labor could be saved, and more ground covered in a day, if everyone would adopt a definite method of procedure in cutting and building a shock. If you are not sure that you have learned by past experience just what will be the best method under the conditions, you can afford to try several different methods—keeping account of such things as the time required and the number of steps taken for each shock—before deciding just what system to use. The system which you finally adopt may not be absolutely the best one, but it will certainly be better than the haphazard way.

The work of a young farmer I visited while he was cutting corn last fall offers a good example of the way in which a seemingly unimportant detail may cut down a man's output. He was following a fairly definite system in cutting and building the shocks, but evidently had given no thought to tying them. The wind was rather high, and he had to tie each shock as soon as it was cut.

The time was in a badly tangled bunch, which was always dropped on the ground somewhere near the last finished shock. When ready to tie the next shock the worker had to walk back and search among the stubble and weeds for this little bunch of twine, and then untangle a string. My watch showed that this generally took nearly a minute. He was cutting from 75 to 100 shocks per day, so he lost at least an hour's time and walked a

half or three-fourths of a mile each day, just because he had never stopped to think about the details of this little operation.

When shocking wheat or oats it may be harder to follow a definite system than when cutting corn. The binder must be doing exceptionally good work, and the binder operator must pay very close attention to dropping the bundles if the work on every shock is to be exactly the same. But the shocker who sizes up his work, looks at the bundles on the ground, and decides before he starts the shock just where he will build it to cut down the amount of carrying, how many bundles he will put in it, how many caps he will use, and who has a fixed order for starting and building the shock, will accomplish considerably more with the same effort than the man who gives these matters no thought.

### How Three Men Worked.

The other day I was in a 50-acre oat field, where two binders had cut nearly the whole of the field before the shockers started to work. There were three men shocking, and each of them was going down a bundle row by himself. There were 15 or 20 shocks to each bundle row, and I could see no difference in the amount of work required on the different rows. However, one of the men always finished his row first, and helped the others set up their last three or four shocks.

This man was nearly 70 years old, had stooped shoulders, and a shuffling walk, and it did not seem possible that he was exerting more energy than the others, who were considerably younger and apparently more able. A half-hour spent with each one showed me that the old man was actually making fewer motions, and that each individual motion was slower than those of either of the others. He was using his head in an effort to conserve his muscular energy, and as a result he accomplished 20 to 30 per cent. more than his fellow workers.

That same day I found on a neighboring farm an even more striking example of differences in efficiency. On this farm, also, were three men shocking oats, all-day hands receiving the same wages, but there were no great differences in age or physical ability. However, one of them set up nearly as much grain as the other two together, and the quality of his work was noticeably better.

The two inefficient ones worked as a pair, but made no attempt to get in any teamwork. The size of their shocks varied from 8 to 16 bundles, they generally used both hands to pick up a bundle—it can be done with less effort and time with one hand—and they never tried to carry more than one at a time. As nearly as I could judge, the other man did not use up any more energy during the day than each of these, but he did not do anywhere near as much unnecessary walking and carrying, nor use anything like as much effort in picking up the bundles and placing them in the shocks.

Some men just naturally seem to get more done than others, but if you will watch their work carefully for a little while you can always find the reason for it. Are you sure that you do not lose a lot of time just because you do not size up your own work or that of your help as carefully as you might? Handwork in the field, the daily chores, and all the odd jobs on the farm still take a surprisingly large amount of time. And time means money.

### How Well Should Work Be Done?

When work is done by machine it takes just about as long to do it poorly as it does to make a first-class job of it. If you have a good corn planter or grain drill, and handle it right, you should do a good job of planting. If you have a poor machine, and do not adjust it and handle it properly, you will likely do a poor job. But in either case you will cover about the same amount of ground in a day.

In nearly all handwork, however, after a certain point is reached, added quality can only be secured at a considerable sacrifice in quantity, and it may pay to figure a little on how well a piece of work should be done.

If you are doing it yourself, have plenty of time, and are not neglecting other gainful work, you can afford to do work of extra high quality, while if you were hiring the work done the reduction in amount resulting from doing it better might more than offset any possible gain.

Take shocking wheat or oats as an example: The man with only a few acres who can use some unpaid family labor, or can exchange labor with a neighbor without any outlay of cash, can afford to take more pains and spend considerably more time per acre than can the farmer with a large acreage who has to run two or three binders to get his crop harvested before it gets too ripe to handle, and who has to pay a good price for all the labor used in shocking.

The first man can have enough help in the field to follow close behind the binder, pick up the bundles almost as soon as they are dropped, and set them up in solidly built shocks, with two well-broken, precisely placed cap sheaves on each, so that, even the worst wind and rain storms can do

little or no damage—all for the possible saving of a few dollars on the entire crop. The man with the large acreage and the expensive help can only afford to make his grain safe from the ordinary weather. He will expect each man to set up twice as many sheaves in a day as the small farmer does.

However, to do this the men cannot follow around the field after the binder and have all the grain set up within an hour of the time it is cut. They must work down the bundle rows at a considerable distance behind the binder, and some of the grain must lie on the ground for a day or so after it is cut.

Even then the shockers cannot spend so much time with each shock, but must be content with building them so they will withstand the ordinary weather between cutting and stacking or threshing. Of course, in some years the damage done by the weather to a crop handled in this manner may amount to more than the 50 per cent. saving in the cost of shocking, but not often the same principle holds true for nearly all hand-work on the farm.

### Marketing Hog Products.

The year before the war, or in the fiscal year 1913-14, Canada exported, mainly to Great Britain, 23,859,754 lbs. of bacon, 1,890,182 lbs. of ham, and 1,811,204 lbs. of pork. For the last fiscal year, 1920-21, she exported 98,233,800 lbs. of bacon and ham and 1,325,700 lbs. of pork, a total of 101,359,500 lbs. against 27,561,140 lbs. in 1913-14. This increase was below that of the abnormal year of 1919-20, when because of exhausted stocks abroad 230,324,900 lbs. of hog products were exported. These figures are taken from the third and revised edition of "Swine Husbandry in Canada," a bulletin recently issued by the Dominion Department of Agriculture. It is interesting to note that domestic consumption has increased to such an extent that less and less can be spared for export, and the danger is great that we may lose our footing on the British market in consequence. With a maintenance of the supply, however, Canadian hog-raisers may look forward to the future with confidence.

One thing of great importance is that if the market is to be maintained, hogs must be properly finished. According to reports from the leading packing companies the proportion of unfinished hogs is much too large, running as high as 15 per cent. in central and western Ontario and 20 per cent. in eastern Ontario and Quebec. In the western provinces proportionately fewer light hogs are marketed, the tendency being to run to the other extreme. Hogs that exceed 220 lbs. live weight are not suitable for the production of bacon.

The breeds of swine most favored in Canada are shown by the registration of pedigrees with the Dominion Swine Breeders' Association. For instance, in 1919-20, the numbers recorded were 5,578 Yorkshires, 3,722 Berkshires, 2,325 Duroc-Jerseys, 1,877 Chester Whites, 1,009 Poland-Chinas, 727 Tamworths and 258 Hampshires. The characteristics of each of these breeds are described in the bulletin referred to, together with information as to breeding, rearing, feeding and housing, supplemented by illustrations. Pork production on the Prairies receives particular attention. The Veterinary Director General contributes a paper on hog cholera, with quotations from the law in regard thereto, and the Chief Meat Inspector one on tuberculosis, its causes and symptoms.

When picking grapes, handle them by the stem and avoid injuring the bloom on the berries. The bloom adds to their looks and selling qualities.

## Proper Housing of the Farm Flock Pays

Thousands of farm flocks are being culled and the non-layers weeded out; new and modern poultry houses are being erected, and the entire project is showing a decided tendency toward betterment.

A farmer known to the writer several years ago conceived the idea that if good housing and better treatment for cattle and hogs resulted in increased revenue for him, the same principle could be applied to his poultry. He went ahead on this assumption, and the first move he made was to remodel his old poultry house, which was by far the worst-looking building of his farm group. He enlarged the house to twice its former size, applied every principle of correct construction and culled out one-half of his flock, because the hens failed to show the proper characteristics of good egg production.

His success was assured from the start, and his hens paid for the entire work of remodeling his poultry house, in the first four months, the first winter. The past year, according to his record, he sold \$750 worth of eggs, it paid nothing of the poultry sold. It said him to house his poultry properly.

Cases are numerous where better housing and care of the farm flock have returned the owner a decidedly increased revenue.

It has often been said that less attention has been paid, generally speaking, to the poultry on the farm than to any other kind of livestock. Undoubtedly many a farm woman has

## Good Housing Saves Cattle Feed.

More especially when feed is scarce it is important that farm animals make the best use of what they consume. Cattle or other stock stabled in quarters that are too cold, or on the other hand, where proper ventilation cannot be provided, will not only fail to put on flesh, but also to give milk to their full capacity. While cattle can acclimatize themselves to unfavorable stable conditions, it is better to provide conditions as near perfect as is practicable. Cattle living in a cold temperature will take on much heavier coats of hair than those which are warmly housed. This ability to adjust themselves explains in some measure the success that attends feeding cattle for beef in open sheds. No successful farmer, however, would think of keeping dairy cows in open sheds in the winter time, nor of keeping them in a stable in which the air temperature is not to some extent controllable.

It is conceded by live stock authorities that it is worth while to provide for a proper ventilation of all stock barns. A necessary factor in stable ventilation is to so construct the walls as to practically exclude the air, and to have the windows and doors so fitted as to avoid draughts of air blowing on the animals. The ventilation system should be independent of other avenues of air.

Experimental Farms Bulletin No. 78, available at Ottawa, points out that the air in a stable where the thermometer shows several degrees of frost may easily be very impure. Matters should be so arranged, it is pointed out, that there shall be about the right number of animals in the stable, allowing, say, from 600 to 800 cubic feet of air space for each cow two years old and over. With a well built stable thus filled with cattle, it is pointed out that the capacity of the outlet should be about 15 square inches for each animal, while the controlled inlet should be about 8 square inches for each animal. A square 36 feet by 30 feet by 10 feet high, accommodating 18 or 20 head, should have an outlet about 18 inches square or 20 inches in diameter if round, while the inlets should be at least 6 inches by 12 inches, and two in number.

The Experimental Farms have at their several farms and stations installed what is known as the Rutherford system of ventilation, which is fully explained in the bulletin already named, and which may be obtained from the Publications Branch, Queen Street, Ottawa.

### Harvesting Potatoes.

The poor yield of potatoes expected over considerable areas of Canada this year, suggests the importance of making the very best of whatever crop is harvested. Nothing is gained by leaving potatoes in the ground after the tops have died. Whether the killing of the tops is due to dry hot weather or to disease, potatoes will make no further growth and had better be lifted and stored in a controllable temperature or immediately marketed.

Potato vines that have been killed by late blight will usually rot as soon as conditions are favorable. The sooner, therefore, such potatoes are dug and used the better will be the results from the crop. Potatoes will keep better if dug in dry weather, or even when the soil is comparatively dry. If taken up under such conditions, the tubers are ready to go into storage or to be shipped in presentable shape.

The Dominion Horticulturist, W. T. Macoun, recommends the use of the mechanical potato digger where the acreage is considerable; that is to say, where the work of digging cannot be done within a few days. He points

# Farm Crop Queries

CONDUCTED BY PROF. HENRY G. BELL

The object of this department is to place at the service of our farm readers the advice of an acknowledged authority on all subjects pertaining to soils and crops. Address all questions to Professor Henry G. Bell, in care of The Wilson Publishing Company, Limited, Toronto, and answers will appear in this column in the order in which they are received. When writing kindly mention this paper. As space is limited it is advisable where immediate reply is necessary that a stamped and addressed envelope be enclosed with the question, when the answer will be mailed direct.

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L. F.: Will you please give the best methods of eradicating the common large milkweed, and also the best method to destroy sandburrs, this for fields that are in crops every year.

Answer: There are several methods recommended for treating perennial weeds, all of which are based on the general principle of preventing their root systems at a time when the plant is exhausted. If the fields is badly infected I would advise you to lose a cropping season, plowing the field as soon as possible and working it at least once a month this fall until winter sets in. In the spring take up the working of the field again with a spring-tooth cultivator and continue this at periods of three weeks or a month until mid-summer when the weeds should be pretty thoroughly killed out. If you are so located that you can grow fall grain this field can be safely sown with fall wheat next autumn.

If you must erop the ground I would offer the same advice as above for fall working with a little more careful and frequent spring operation until the time that your spring crops have to be seeded. I would still further advise building up the fertility of the soil, so that the general crop growth will be advanced to such a degree that much of the weeds will be smothered out. As a general rule many weeds thrive where soil fertility is declining. Manure and fertilizers will do a great deal to build up your field.

D. R.: I intend to seed fifteen acres with rye this fall and cut same next year, and want to use this land for pasture the following year. I would like to know whether it will come up the following year, how much to sow to the acre, and when is the best time to sow. The land is clay and gravelly loam, very uneven, and has a great many stones on it.

Answer: Rye will not come up after being cut. If you want pasture for next summer I would advise you to seed the rye with about 8 lbs. of common red clover, 4 lbs. of sweet clover, 2 lbs. of alsike and 2 lbs. of timothy. Fall-sown rye will come along quickly in the spring. If you wish to cut it for hay you will probably be able to

get it off during May or early June. If you wish to let it ripen the grain will probably be cut from the middle to the end of June. Clover and grass mixture will come along rapidly and make a good stand before fall. The following spring it will be suitable as a pasture crop or will provide one cutting of hay and a second crop for pasturing. To make sure of the stand and to give both the grain and the grass increased vigor and growth, which will mean increased yield in grain and hay, I would advise you to fertilize your ground with about 250 to 300 lbs. per acre of a fertilizer analyzing 3-8-3. This can be worked in at the time the grain and clover seed is sown if you have a grain drill with a fertilizer-sowing attachment. If not, scatter the fertilizer evenly on the plowed ground and work it in with harrowing and disking, working down the seed bed.

E. B.: I have a field of clay that I have had into corn for two years and intended to sow rye and vetch this summer, but other work came on and I was not able to get it clean enough for that. I am wondering if I could plow it this fall and seed to rye and vetch after the corn is cut. Clover does not do well on this piece and I wanted to lime it this spring, but could not. Sorrel does well. Would it pay to plant the vetch without liming? My farm is small and I wanted to cut out the small grains and raise corn and hay, so want to seed in the corn. The land is good and strong.

Answer: Fall rye and winter vetch sown during the autumn should become well established and come up the following year in quantities sufficient to make good pasturage. For seeding use about a bushel or five pecks of rye with twenty-five pounds of early vetch to the acre. In order to make as sure as possible of a good stand I would advise you to drill in about 200 lbs. per acre of a fertilizer analyzing 4-10. If you do not have fertilizer drilling machinery, scatter the fertilizer on evenly before the last harrowing and work into the soil when you are harrowing in the seed. This additional fertility will give both the rye and the vetch a vigorous start which will help them stand the winter and give them added growth and strength.

out in Leaflet No. 15, Digging and Storing of Potatoes, that not only will the potato digger raise the crop more economically than a fork or plow, but with it the grower is more likely to get his crop dug and gathered while the weather is fine, which is a great consideration.

### Warbles in Cattle.

Investigations were started in 1911 by officers of the Health of Animals Branch, Ottawa, to discover expedients that would reduce the plague of warble flies which worry cattle and to ascertain the damage they inflict and how. While it is impossible to ascertain with any exactitude the amount of loss they cause and the extent of the injury these pests inflict, an idea of the immensity of the damage they cause can be imagined when it is stated that particulars obtained from the principal tanners show that 27.5 per cent. of the hides are injured by these flies every year. In addition, the loss of milk from dairy cattle affected and the injury to beef cattle has to be taken into account. These investigations, which are being continued, are set forth in a bulletin prepared by the Chief Animal Pathologist and published by the Dominion Department of Agriculture. There are two classes of the pest, one known as Hypoderma lineatum and the other as Hypoderma bovis. The former makes the earlier appearance of the two and is the less irritant. At Agrassiz the first flies were taken in 1915 on April 15. Their activity lasts for eighteen days. They settle under the cow's heel and attach their eggs to the coronet or in the region of the fetlocks and on the knees and hocks. Hypoderma bovis appears in the early part of June and continues busy until the beginning of August. While H. lineatum gets its work in while the animals are resting, H. bovis usually attacks cattle on the outside of the hind quarters and on the legs above the fetlocks when they are on the move. Tanners agree that rough, long-haired, ill-kept animals are the most warbled and that well-fed, properly and cleanly housed animals are far less frequently affected. The tanners are also agreed that warbled hides are dear at any price. Buyers are consequently cautious and pay a lower price where the pest is in evidence.

Cut out old canes of raspberry and blackberry bushes. The cuttings should be burned promptly in order to destroy insect and fungous pests which may be on them.



### The Slumber Coach.

When we are safely tucked in bed,  
Baby, and Jean, and I,  
And the great, soft dark looms overhead  
And the coals in the fireplace die,  
We hear the wagons far down the street  
As they rumble slowly by,  
And we love the song of their turning wheels,  
Baby, and Jean and I.  
First it's a farmer man and his wife  
Who've been in the town all day;  
The great gray horse that drags them on  
Dreams of his clover hay.  
The farmer's wife will light the lamp  
When she reaches her night-black door,  
And she'll carry her little child to bed,  
Creakily, over the floor.  
Then it's a postman, and then it's a squire,  
And then it's a gypsy train;  
And still we listen and still we hear,  
Moonlight or wind or rain;  
And last of all and every night,  
Sure as the day is through,  
The Slumber Coach like a gray ship comes,  
Wet with a wealth of dew.  
Tis the Gray Sandman that hold the reins  
And drives from the End of Day,  
There are two little elves at the horses' ears  
To whisper them over the way.  
The gray coach door is open wide,  
And we climb in with a sigh  
And are driven away to Sleepy Street,  
Baby, and Jean and I.  
—Miriam Clark Potter.

In cutting the winter's supply of wood care should be taken that only dead trees or those that are hindering the growth of others more valuable should be taken out.

Currants and gooseberries may be pruned as soon as the leaves fall; or the work may be left until early spring. Cut back one-third of this year's growth, and thin out surplus, diseased or unthrifty roots. Old bushes may have two-thirds of the present year's growth removed.