

No. 3 straw. I had 22 lbs. of grain and 35 pounds of straw.

All three varieties received the same amount of care. These oats were sowed on black clay soil. I took my neighbors to see them while they were growing. We learned considerable about the oats, and we liked the O. A. C. No. 72 oats the best. I bought 10 bushels and sowed them this spring, because they grew more straw and a larger yield of oats than the other varieties. Renfrew Co., Ont. PERCY MOORE.

### Two Boys Who Are Interested in Farm Work.

At a recent dairymen's meeting there was no one who showed more interest in the proceedings than did two boys, both under 15 years of age. They listened attentively to the addresses and discussion which followed, and one was heard to remark that he was looking after his calf in much the same way as the speaker outlined. When a number of animals were brought into the ring to be judged these boys sized them up, and placed them according to their way of thinking. Sometimes their judgment differed from that of the judge, but they were not convinced they were wrong until reasons were given and the main points of difference mentioned. Most of the young men and many of the older men present were not paying much attention to the judging, and few of those who were could converse on the breed in question as intelligently as the two boys. Back of the boys' knowledge and enthusiasm was the interest of the father, not only in a particular breed of stock but in two growing boys. Instead of leaving them at home

to cut thistles or chore around he brought them with him, a distance of 30 miles, in order that they, as well as himself, might secure information relating to their daily occupation.

There is plenty of work on this dairy farm. The younger boy, who is 12 years old, is required to milk 5 cows night and morning besides doing other chores. The older brother milks 6 cows. Board, clothes and spending money are not considered to be sufficient pay for the work done, so a year ago each boy was given a pure-bred heifer calf, and this spring they were given another. It is not a case of the boys' calf and father's cow, but a straight business proposition in which the success depends on the boys. The boys are familiar with the pedigrees of the calves, and have decided on the sire they wish to use when their heifers are of breeding age. Feeding is also made a study of in order that a suitable ration may be fed and the calves kept in good condition, because it is their intention to exhibit them at the local fairs this fall. A little milk is fed at the start, but the ration consists principally of rolled oats, shorts, oil-cake and clover. Care is taken to keep the pen clean and to put the feed in a clean manger. The calves are taught to lead, so that there will be no trouble at show time. Last year one calf took the red ribbon at each place it was shown, and the prize money was banked by the boy. The father takes his boys into his confidence, he discusses the work with them, and in turn they take an interest in everything done on the place.

Richard and Wesley Pinnegar, of Middlesex County, for these are the boys' names, are studying the why and the wherefore of work done about the farm, and take a pleasure in doing their share of the chores because they understand what they are doing. They know what families of the breed they own, are most

prominent, and they know that certain feeds, more than others, go to produce bone and muscle on the animal body. Although still at the age when most boys think of nothing but play, they are endeavoring to find out the quality of stock other breeders have, and to see how it compares with their own. It is fairly safe to predict that Richard and Wesley will make successful stockmen. If many boys and young men who are dissatisfied with farm life would only stop and view things from a different angle they would discover that the farm offers splendid opportunities for advancement to those who make a study of its numerous problems, and then put their knowledge into practice.

### Get in the Competition.

Essays are now coming in for the big competition announced in our issue of June 22. We want all boys who have had experience in any branch of farming to give us an account of what last year's experience meant to them, either financially or in the matter of improving their understanding of their business. It is not a difficult task. Write 800 words or less on some of your work, and win \$10, \$8 or \$5 as a special prize. Those not winning, but worthy of publication, will be published and paid for. Our young readers have asked for this kind of information. No one can give them what they want in a better way than you. Farm boys and young men, let other farm boys and young men know what you are doing. Mail your essays early. Contest closes July 22, and all must be mailed on or before that date. See announcement in the issue of June 22 for further particulars.

## Automobiles, Farm Machinery and Farm Motors.

### The Care of a Car.

The care of a car is largely a matter of common sense, and we feel sure that every farmer can exercise this faculty to far better advantage than his city brother because of his acquaintance with machinery and its needs. After you have driven your car home, make arrangements for a wash rack. This should be located in a shed or barn, but if such a building is not available, any shady spot will do. Make sure, however, that the place selected is not reached by the sun, as the cleaning of an automobile in the bright rays of Old Sol would soon dull the varnish and kill the lustre. If you have a satisfactory building, see that there is a vent in the middle of the floor in order that the water may be run off to some place where the earth can absorb it. Sloping down to this vent you should have slatted boards in order that the dirt may be carried away without unnecessary trouble. The big essential for preserving the appearance of your car is water. This can be arranged for by a pipe from a windmill or a pump. These sources of supply not being handy, the water should be brought up in barrels, as an unlimited quantity is absolutely necessary. The preliminary arrangements having been made and the car placed upon your rack, cover the engine with thick oil cloth or other water resisting material. You are now ready to proceed. Throw the water, either with a hose or a bucket, all over the car from end to end and side to side. If a large quantity of dirt has adhered to any part, give separate treatment, but do not in any event rub the earth except in a flow of water, as fine particles of grit are sure to scratch the paint and enamel. When all the dirt has been removed, give another application of water and follow the spray along with a sponge. Having been completely assured that all foreign matter is removed, rub down the car with chamois leather, and when it is dry, move it out into the sun, but under no circumstances allow any hot rays to strike the machine until every drop of water has been rubbed off. If this system is followed with regularity, your automobile should present a spick and span appearance years and years after the date of its purchase, but neglect will rapidly throw your investment into quick depreciation. As long

as your engine is covered, no possible damage can come to any part of the motor, and tires are built to withstand water under every condition.

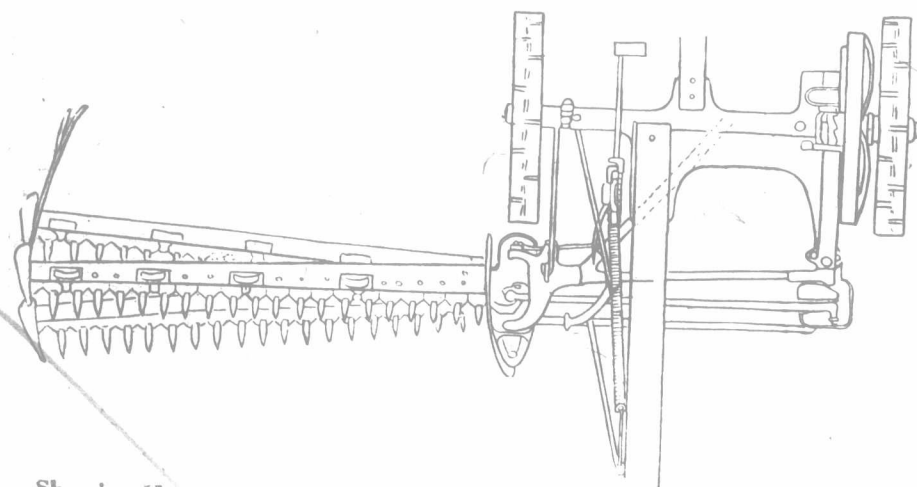
Automobiles require liberal quantities of oil and grease. The agent from whom you buy your car, will advise you the level for the oil in the crank case. Do not exceed the point he indicates because then there will be a large amount of burnt oil exhausted from the back of the car and your driving will become a source of inconvenience. Perhaps you have noticed upon many occasions, the great volume of smoke that is thrown out on the road by a passing machine. This is always due to an excess of oil. You should also have your agent advise you regarding the grease cups which necessity demands should be turned down at regular intervals in order that the lubricant they contain may be allowed to work to the best advantage. If upon looking under the hood you find that there is not a place provided for an oil can, buy or build a little bracket yourself in order that the oiling of the engine may be brought constantly to your attention. Naturally, any piece of machinery constantly becomes covered with the products necessary for its easy operation, but an oily, greasy mechanism of any kind never looks attractive, so do not hesitate to use large quantities of rags or waste in wiping down the engine. If you make visits to city or town garages, it might be well to ask for a coal oil or gas spray. Shoot the mixtures into all the external parts of the motor, and by subsequently rubbing it down, the power plant can be kept bright and shiny. Do not, however, start your engine until the gas and coal oil have been wiped off as there is sometimes an element of danger. There are many ways of keeping the leather in first-class shape, but it seems useless to waste any words of advice upon farmers in this respect, as their vocation has always called for skilled service in the maintenance of harness and kindred products. When the top of your car is down, make sure that the envelope has been pulled over it snugly in order that the dust may not fill the creases, and never under any circumstances, operate your automobile if this envelope has been removed. Should you do so, your top, when next erected, will present an inferior appearance that will not impress your guests. Upon filling a car with gasoline, it is always advisable to cease smoking, and under no

circumstances allow the presence of a naked light, as a breath of wind may blow the vapor in the direction of the flame and cause instant trouble of the most serious character. AUTO.

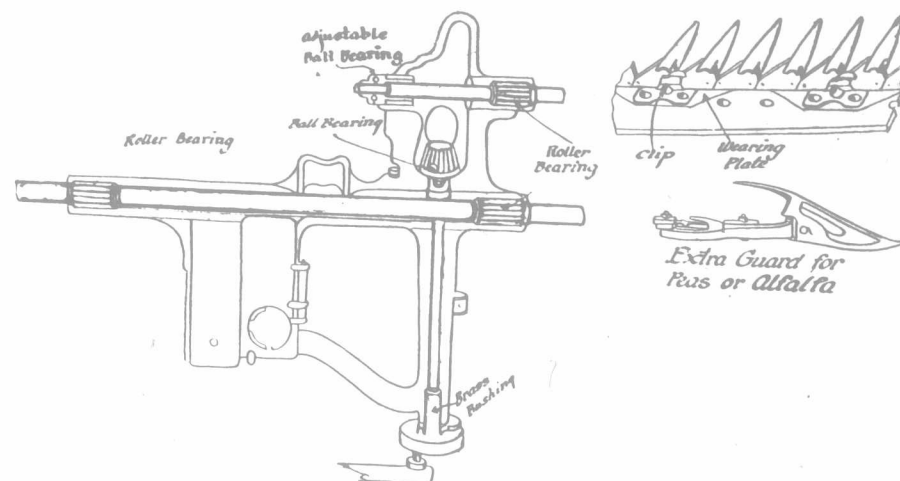
### Some Information About Your Mower.

Haying time is with us, and he is a wise man who has his mower in good shape. When a new mower has to be purchased it is necessary to know exactly what is required, and it is our purpose to consider some points in the construction and operation. Roller bearings should be provided for the main bearings and the pinion end of the crank shaft, and a plain bearing at the crank end. It is not possible to use a ball or roller bearing because of the vibratory action of the shaft tending to wear the bearing out of round. There should be an adjustment at the end of the countershaft to take up wear between the bevel gears. Wooden pitmans seem more satisfactory than steel, because the steel, due to the vibration, becomes crystallized and weak. Some arrangement should be made to take up wear in the hinge joint between the cutter bar and the main frame so that it can be kept in line with the pitman (Fig. 1). The best mowers are equipped with wearing plates where the back of the sickle comes in contact with the cutter bar (Fig. 2). The clips which hold the sickle in place are malleable and may be hammered without danger of breaking. The space between the clip and the knife should be about as thick as a sheet of paper, and under no condition large enough to allow grass to wedge under the clips. The clip is put on to hold the knife in place and give it the required sheaving action.

No matter how fast or slow you drive, the knife must have sufficient clearance. Measure the circumference of the main drive wheel and suppose we find it to be 108 inches, divide by the number of strokes made in one revolution of the wheel, and we will find the distance the mower moves forward for each stroke. Let us suppose it makes 56 strokes, then 108 divided by 56 equals 1.9 inches. It is evident the knife action can cut no more than its length, which



Showing How the Cutter-bar May Sag Causing the Pitman and Knife to Go Out of Line.



Showing Mower Adjustments and Parts.