farmer is not willing to put it off till the bulk of the fall work is done. One of these is to adopt the plan in vogue in Manitoba, and have the proprietor of the threshing machine bring enough men with him to do all the work connected with it. The great drawback to this would be to provide accommodation for so many men over night. The Manitoba plan might, however, be adopted: that of having the owner of the machine carry a sleeping tent with him for his men. Another plan, and one which, in some ways, perhaps, is more feasible, is for the farmer to hire all the help for his own threshing instead of getting assistance from his neighbors. This plan, provided the men could be hired when wanted, has many advantages over the present method. It would enable the farmer to get all his threshing done in a short time, and whenever he wished, and it would not be necessary to lose a lot of valuable time helping his neighbors. By hiring the men not so many would be needed, as the farmer could compel each one to do a day's work. The only difficulty with carrying out this plan is to hire the help when needed. Unless a farmer lived near a village where help could be had readily this plan could not be carried out successfully.

There is a third plan, and one which we think will commend itself to every intelligent farmer. This is for every farmer to do his own threshing with very little if any help from outside the farm. This can be done by the use of a small tread-power threshing machine. These are usually made for the use of a two or three-horse tread-power, and will do excellent work. They are largely used in the Province of Quebec, where the steam thresher is a rarity. For a farmer's personal use, with ordinary care, the machine will last a lifetime. The most popular machine is the regular two-horse tread-power machine. It can be placed on the barn floor in rough or wet weather, and with closed doors the work can be done inside. A machine of this size would require four men to run it, and it would thresh from forty to sixty bushels of oats per hour and other grains in proportion. Recently a farmer near Edmonton, N.W.T., threshed 1,100 bushel of oats in one day with a three-horse tread power machine, and another farmer in the same district threshed as high as 450 bushels of wheat in one day.

From the foregoing it will be seen that this small tread-power machine is capable of doing a large amount of work if properly handled. On the average hundred-acre farm one of these machines should do the threshing in four or five days at the most, and this time could be divided up to suit the farmer's convenience. The threshing could be done on wet days when no outside work could be carried on, and in this way valuable time would not be wasted. Though the small tread-power machine is not used much in Ontario we are inclined to think that it is the coming machine for the average farmer. Other motive power, such as a small gasoline engine, could be used instead of the tread-power. It will enable the farmer to do his own threshing as he does his own harvesting, and at the same time save valuable time and money, which the present system necessarily involves.

Beware of Preservatives.

The use of preservatives in milk or milk products is beginning to receive the attention of the authorities in some of the states of the Union. Recently Dairy Commissioner Mitchell, of Wisconsin, issued a circular to dairymen warning them against the use of preservatives in milk. The following quotation from his circular will be read with profit by dairymen here:

"It is now beyond question that thorough cleanliness, pasteurization and purification by centrifugal separator treatment with subsequent cooling milk may be shipped to market in the warmest weather. These cleanly and sanitary methods have come into disuse largely because chemical antiseptics have been advertised and lauded by unscrupulous nostrum vendors as being entirely harmless, and making all care and cleanliness unnecessary. The use of preservatives has gained ground among milk shippers until the public is becoming thoroughly alarmed, and steps must be taken to prevent it.

"During the last year a new and most powerful chemical disinfectant has been foisted upon the market as being harmless, and with the additional advantage claimed that it could not be detected by chemical means. This substance is formic aldehyde. The substance is caustic, and, if allowed to remain upon the skin, will cause intense burning and itching, and the superficial layers will die and peel off after a fever. Doctors have been obliged to abandon its use as an antiseptic in a very dilute form for preserving ear washes and similar solutions, as continued contact in dilutions as high as 1 to 10,000 causes the skin to die and peel off. This substance, so much more active than borax and boracic acid, has been advertised over this state, and, when the warm weather sets in, dairymen may be tempted to try it, if they are not informed of its true name and character."

A couple of months ago there was some agitation in Canada in regard to the use of preservatives in butter. This was caused by a report from Great Britain that merchants who sold butter containing preservatives of any kind would be heavily fined. Buttermakers here were urged not to use preservatives of any kind excepting salt in manufacturing butter for the British markets. We believe that our dairymen gave heed to the warning given at that time, and that no injurious preservatives, such as borax or boracic acid, are now used or have been used by our buttermakers for some time back. As we previously stated, there is no need whatever for the use of preservatives in making butter for the British markets. If the milk from which the butter is made is looked after properly, and thorough cleanliness observed, and also the best methods adopted in manufacturing, the butter can be sent to the British markets in good condition, providing the cold storage facilities by rail and boat are taken advantage of.

The warning of the Wisconsin dairy commissioner is for milk-suppliers only. But it makes little difference. The use of an injurious preservative in any kind of a food product is dangerous. The commissioner seems to admit that some of the Wisconsin dairymen, at least, are like dairymen everywhere, in that they are inclined to do as little work as possible. This inclination to get rid of doing things is a characteristic of mankind that seems to be taken advantage of by vendors of milk preservatives, butter-in-a-minute churns, and such like. They know that if they can reach some lazy dairyman with a plan that will enable him to get along without observing cleanliness in milking and care in looking after the milk, and also that will enable him to get butter in a minute instead of in half an hour, he is apt to bite, no matter what injurious effect such a scheme will have upon the milk or its product. It is, consequently, necessary to keep on warning the people against such practices.

With regard to the use of preservatives, we do not think there are many in this country who use them knowing their injurious effects. Nor do we believe they are used to any extent by those making butter for the British markets. We have known, however, patrons of cheese factories who would preserve a can of milk over night by the use of saltpetre or some such substance. There is no need whatever for anything of this kind if the milk has been properly looked after from the beginning and special attention given to aerating and cooling it properly. When this, together with thorough cleanliness, is observed in every case, there is no need, under ordinary conditions, for a preservative of any kind, either to keep the milk or to preserve the butter made from it, till it reaches the consumer.

The Binder Twine Supply.

Our prediction of a couple of weeks ago that the price of binder twine was likely to go up before harvest was over has already come to pass. Farmers, who have not their supply on hand, will have to pay several cents per pound more than they would have had to pay a few weeks ago. There is now considerable excitement in the binder twine trade circles. Dealers without large stocks are endeavoring to get hold of supplies, while the fortunate few who have large stocks on hand are in no way inclined to sell.

There are fears, now that an exceptionally big harvest is assured, that there will likely be a shortage of twine before the grain is all harvested. Probably this may result. But we are inclined to think that farmers, realizing the situation, have purchased their supplies earlier than usual and, consequently, have the bulk of the quantity needed for this season already purchased. There will be a tendency on the part of the farmer to make the supply on hand go as far as possible if a scarcity is likely to result, and in this way the famine in binder twine that is being predicted in certain quarters will not reach us this year. There is more than one way of conserving the supply. In addition to making larger sheaves when cutting, a great deal of the spring grain, such as oats, need not necessarily be tied, but can be taken in loose, and a saving in twine made in this way. Then, if a farmer is pushed, he can go back to the old fashioned method of binding the grain by hand, and it would be no great hardship if this had to be done for a small portion of the later harvest. There is not much doubt about there being a sufficient supply for the wheat harvest, and when this is gathered thereneed not be any great difficulty about the rest of the crop.

However, according to the present condition of the market, those who did not purchase their twine a month or three weeks ago have evidently missed it, and will have to pay a half if not three fourths more for their twine supply. A couple of months ago twine could have been bought by the farmer for less than eight cents per pound and now twelve or fifteen cents will have to be paid. The price on this side is about two cents lower than in the United States.

Not only is this season's supply being figured upon, but many are predicting a scarcity for two or three years to come. There is no manilla to be had, and, if the Spanish-American war continues for a while longer, it may be sometime before the Philippine Islands will be able to furnish any. In the meantime other raw materials, such as sisal, will have to be used, and, as we pointed out a few weeks ago, the supply of sisal is not likely to be overly large for a year or two. It would therefore seem by summing up the whole situation that for two or three years at least binder-twine will cost the farmer more than he has had to pay during the past year or two.

Sanitation in Cheese Factories.

At this season of the year when the weather becomes excessively hot and the air dry it requires a little more attention on the part of cheese factory managers to keep the sanitary arrangements around the factory buildings in perfect order. Even when this is done the location of a cheese factory or a creamery may be detected quite a piece away by the sense of smell. The whey drippings or a leakage in the drains will soon cause a cesspool sufficiently odoriferous to produce an attack of sea sickness. If, where the sanitary conditions are given considerable attention, these disagreeable odors are lurking around, what must be the nature of the odors where the sanitary conditions are almost altogether neglected. No odors ever come forth from such places; they are nothing but abominable stenches loaded down with a living freight of disease-producing and obnoxious germ life. No cheese-maker should allow such a condition of things to exist. If he cannot remedy the difficulty himself let him visit the directors immediately and, if they won't make an effort to do so, call in the local health officer.

It is often a surprise to us that cheesemakers as a class are blessed with such good health. It is difficult to understand how makers working day in and day out in some of the dirty, filthy, unsanitary factories we have seen can keep foul disease away. Perhaps "familiarity breeds contempt," and the disease-producing germ prefers to practise his art on some new and unfamiliar ground. But not only is the health of the men working in an unsanitary factory involved, but the health of the people living in the locality of the factory, and herein is another matter of surprise that those, living adjacent to a cheese factory or creamery where wholly unsanitary conditions pre-