the period indicated, and conducted, so far as practicable, on the same principle as that required for properly curing medicinal herbs. As a general practice grass is allowed to stand too long before haying is begun. Grass for hay is often injured by being exposed too much to the rays of the sun. This not only causes the volatile aroma to escape, but much of the coloring matter also, as shown by its bleached appearance. The milk and butter produced by feed of this kind will be deficient alike in color, flavor, and quantity. Repeated tests made at experiment stations show that grass or other fodder crops should be cut and cured before the formation of the seed has begun. As the seed ripens a large portion of the nutritive matter from the stalk goes to perfect the seed, and the per cent. of insoluble woody fibre is nearly doubled. It is calculated, therefore, that the feeding value of a ton of hay made from timothy grass before the ripening of the seed, is fully one quarter more than if the seed were to be allowed to ripen before the cutting is commenced.

"I prefer to begin cutting clover when it is in full bloom, and as soon as the dew is off it in the morning. Timothy should be cut before the seed passes out of the milk stage. When the growth of either is very heavy, it will be no gain to begin the cutting before the dew is off. The best hay makers do not allow dew to fall upon their unraked hay that is partly dry, but put it in cocks to cure. Ordinarily, a good way is to arrange to run the mower from about 8 a.m. to 1 p.m., when, after an hour's rest, the work of raking that which was first cut should be commenced. In many cases, especially if the soil be dry, that part of the crop which was cut in the morning can be put in the stack or mow in the afternoon. Good results in clear, dry weather frequently follow from raking each day's cutting into close, compact windrows and letting it remain over night, and then the following day turn it over and haul it to the barn or stack. In this case the heat of the sun absorbed by the wilted clover continues the curing process during the night, so that the effect is much like that resulting from putting the grass into cocks to remain three or four days. If no rain occurs during the night, this plan is an economical and good one. My usual plan with clover is to cock it up late in the afternoon and allow it to stand until the sweating process is over, then open it out to the air so as to keep about one load ahead of the team, and yet not dry the clover sufficiently to render the leaves so brittle that they break off and fall to the ground

"Where heavy crops are grown, the hay tedder, mounted on two wheels and drawn by a horse, is an exceedingly desirable implement. The rear part of the machine is so constructed that when the tedder is drawn forward, the grass in the rear is tossed into the air and thus dries quickly. The horse hay fork is another indispensable implement in modern hay making. When the mowing machine has been in use several years, examine the section guards and see whether the edges of the little steel plates have become rounded by use. If so, have them repaired before beginning cutting. In mowing away hay, scatter each hayforkful as much as practicable. In stacking, keep the centre solid and high and the outside comparatively loose. When the stack is completed, rake down well the following morning, put a good cap on top, and anchor well with two strong No. 9, 10, or 12 fencing wires."

SHEEP-DIPPING.

An interesting work entitled "Sheep-Dipping; a Digest of the Latest Information and Practice connected with the Process," has just appeared; the author, Mr. David Wood, has exhaustively gone through all that is known of the process, and aided by his own great personal experience, produced a work of immense value to flockmasters. Mr. Wood put himself in communication with the leading sheep farmers of the country, and the result is that he is able to tell us that the professions of supplying non-poisonous sheep-dips are so much moonshine, and that all patented sheep-dips are pretty much one and the same in composition. He is careful to quote from the English Patent-office specifications to describe the compositon of nine different materials that are popular in the market. They present a very wide field of choice of poisons suitable for destroying parasites on sheep, which is the object of all dipping, any one of which may prove tolerably effective when properly applied:—"The question narrows itself down to this, which poison or poisons are the best and most economical to use for this purpose. We have no hesitation in naming carbolic acid and arsenic, or spirits of tar and arsenic. We are not sure whether creosote would not do as well or even better, but we have no certain information to offer on the subject. That the two poisons named will do the work thoroughly we shall be able to prove, we think, to the satisfaction of all unbiased persons, and if such is the fact, in the name of common sense why continue to pay any man, or set of men, three or four prices for the same materials or their equivalents disguised and their efficacy greatly reduced? That the action of these materials (leaving out arsenic) is greatly impaired in the mixing-pot of the manufacturers is clearly proved by the ever-increasing numbers who add actively poisonous igredients to the so-called non-poisonous dips." Examining the composition of the nine dips specified, Mr. Wood says that each one contains valuable ingredients, but many of the ingredients are useless, while every one of them contains in excess the mischievous elements of caustic soda or potash. Mr. Wood's contention is that to introduce strong alkalies is destructive to the natural yolk of the wood. He says:—

"It is well-known that on all healthy sheep there is a natural greasy exudation, call it by what name you like; this is nature's waterproofing, and it should be the flock-master's study to encourage and preserve this by all the means in his power, but to introduce soda or potash into the dips in any quantity is to take the most certain step to destroy it. This greasy exudation takes rank amongst what is known as fat oil, and the introduction of alkalies simply turns it into soap. In other words, nearly the whole of the present dips turn the sheep into walking soap factories."

Some mixtures pretend to nourish and waterproof the wool. "There is only," observes Mr. Wood, "one possible way of nourishing the wool, and that is by keeping a healthy skin. It is from the root the wool must receive its nourishment." The only way that wool can be partially made waterproof is by using oil or grease in such quantities as to stick it together. Mr. Wood makes copious extracts from letters showing the practice of sheep farmers, and he also discusses the times at which dipping should take place, assuming that the stocks are healthy. Another section of the treaties relates to methods of dipping, and specifications are given for the construction of baths for stocks of various sizes for the mixture and application of the material, accompanied by a drawing of complete set of apparatus constructed for his own use. The pamphlet is a most valuable one, and ought to have a good sale.

DON'T HURRY YOUR TRAINING.

From the Chicago Breeders' Gazette.

The meeting at Point Breeze Park, Philadelphia, which came to an end on Friday, was the only gathering of consequence in which the trotters took part. There were, to be sure, several days of the sport at other points, but at only one of them, Terre Haute, Ind., was 2.30 beaten in any of the classes, and the season has been such a backward one all over the country that it is only in exceptional instances that horses have received sufficient preparatory work to stand even a moderate amount of trotting in actual races, and in one or two cases where a bruising contest of five or six heats has resulted the falling off of time has been of so pronounced a character as to show plainly that while the spirit was willing the flesh was weak, and in one of the races at Philadelphia won by him we find the Lambert gelding Frank beaten in slower time than 2.25, after he had gone the initial mile in 2.20¾. It is an old and truesaying that any horse will stop when out of condition, and it might with equal truth be asserted that one or two races of the hammering kind will give a trotter such a set-back that he is not likely to round into his true form again until the season is so well advanced that the golden harvest has not only been reaped by others, but securely stowed away for future use. The drivers who banged their horses to pieces in the series of three meetings held in Philadelphia are now wishing they had followed the example of some of the older and wiser heads, notable among whom were Splan and Turner. The former had such good ones as Wilson, Belle F., Onward, and Oliver K., in his string, but not one of them has thus far faced the starter, and Turner kept all his high-class flyers in the stable, only Dick Organ and Nettie Thorne being pulled out to do battle for the money. In the West much the same order of things is seen. Budd Doble and Peter Johnston have all the horses they can train, but neither of them has yet started an animal in a race, nor do they intend to do so for two or three weeks to come. They are men of judgment, which is the result of experience, and do not propose to break a bow by two much shooting before it is thoroughly seasoned. The best drivers in the country are not in the fray as early as some of their brethren, but they remain, strong and active, after the others have been carried away to the hospital.

CROPS IN VICTORIA.

The *Australasian* of March 14 thus reports on the official crop statistics of Victoria:—"We are now in receipt of the Government agricultural statistics, which are this year earlier than usual, and are virtually complete. This is a great improvement on last year, when the figures were given as they came to hand, and the final totals were made up later. As was expected, the yield of wheat this year is considerably less than that of last year, both as regards the acreage sown and the average. At first sight it would appear that the actual acreage sown was less; but it must be borne in mind that, owing to the severe drought in some districts, the crops were entire failures, and were never harvested or even cut for hay. The area actually sown may, therefore, have been in excess of that of last year, but that