Fly Remedies.

Kansas State Agricultural College recommends the tollowing mixture to keep flies off young stock in summer-time: Resin, 1; pounds; laundry soap, 2 cakes; fish oil, i pint; enough water to make three gallons. Dissolve the resin in a solution of soap and water, by heating; add the fish oil and the rest of the water. Apply with a brush. If to be used as a spray, add } pint of kerosene. This mixture will cost from seven to eight cents per gallon, and may be used on either calves or cows. One-half pint of this mixture is considered enough for one application for a cow; a calf, of course, would require considerably less. At first it will, perhaps, be mecessary to give two or three applications per week, until the outer ends of the hair become coated with resin; after that, retouch those parts where the resin is rubbed off.

What remedies have our stockmen and farmers found most efficacious for the fly pest? Describe it on a post card, and send for publication in the "Farmer's Advocate," for the benefit of others.

FARM.

Hay-making.

There are few farm operations upon which a wider divergence of opinion can be found than upon the matter, of making hay. The object of this paper is not to set the world right in connection with this question, because we find excellent hay made by a variety of methods, and the farmer must choose that method which adapts itself best to his conditions. There are, however, a few important facts in connection with the curing of hay which everyone andula know, and, though they are already pretty generally known, it is probably worth while to repeat them for the benefit of the less experienced.

EFFECT OF MATURITY.

Alfalfa.—During 1897 and 1898 some valuable work was performed at the Ontario Agricultural College in the way of determining the ellect of maturity upon the composition and digestibilty of alfalta, and the results agree very closely with those optained by the other experimental stations. The alfalfa was cut at three different stages, VIZ., when the buds were just formed, when one-third of the blossoms were out, and when a little past full bloom. So far as the composition of the hay was concerned, the first cutting made rather the best showing, out, owing to the fact that the plants had not attained their full growth, the yield was smaller than that obtained in the second cutting. As maturity advanced there was a markled decrease in the amount of protein, and an increase in crude fiber. As protein is the muscle-forming part of the food and the most valuable constituent of the hay, and as crude fiber represents the woody and most indigestible portion, it will be seen that late cutting means inferior quality of hay. The largest amount of digestible matter was procured by cutting when the crop was about one-third in blossom, and it is fairly safe to recommend the cutting of alfalfa at this stage of maturity.

Red Clover.—The effect of maturity upon red clover is very similar to the effect on alfalfa, except that deterioration does not appear to occur so early in red clover, and cutting may be delayed somewhat longer. The results of numerous experiments go to show that the largest amount of digestible nutrients is obtained by cut-

ting the clover when in full bloom.

Timothy.—Timothy behaves somewhat differently from alfalfa and red clover. There appears to be an increase in nutrients up to the time when it is nearly ripe, the smallest increase being in the case of the protein. Though there is an increase in the total nutrients, it must be remembered that the hay becomes more woody and less palatable as ripening proceeds, and probably the best general satisfaction will be obtained by cutting just after full bloam.

The three crops mentioned are the principal hay crops in Ontario, and, as space is limited, they are the only ones that will be considered at this time. It is worth noting that, while there is a certain stage of maturity which gives the best results, it is not practicable to cut all hay crops at a fixed stage of maturity, and it is advisable, weather being suitable, to commence cutting a little earlier than the times indicated, in order to obtain the best average results.

METHODS OF MAKING HAY

Clover is the most difficult crop to cure, but, when properly made, is the most valuable hay for cattle and sheep, and will also answer very well for horses used for slow work. There are numerous methods used in making clover hay, but most of them may be placed in one or other of three different classes (making due allowance for minor variations), and these three types of making hay will be dealt with separately.

1. Slow Curing.—By this method the clover is cut in the forenoon, shaken up with the tedder or fork during the day, and raked into light windrows and cocked during the late afternoon of the same day. A modification of this method

is to cut in the afternoon, and to defer tedding and cocking until the next day. In any case, the clover is allowed to stay in the cocks for several days, until it gets rid of its excessive moisture, when it is drawn to the mow. Sometimes the cocks are opened out an hour or so before drawing, and sometimes this is not done, depending upon the degree of dryness when drawing commences. Much excellent hay has been and is still made by this method. The objections are, the length of time the hay has to stay outside, incurring greater risk from rain, and the labor involved in cocking and pitching by hand.

2. Quick Curing.—Under this method the hay is really cured in the mow, the term "quick curing" referring to the length of time it is left outside after cutting. There are several variations in this method, but the general method is as follows: The clover is cut in the forencon after the dew is off, raked and put into cocks during the afternoon, and drawn to the barn the following day, care being taken to have it periectly free from dew or rain when handled If a shower of rain should come before the hay is drawn, the first method described will have to be followed; that is to say, the hay will have to be thoroughly cured before it is put into the barn. Unfortunately, experimental data are lacking regarding this method. There is no question that a great deal of good hay has been made in this way, but whether the method can be employed in filling all kinds of mows and lofts, has not been fully demonstrated. It is pretty generally believed that large mows are better than small ones for this purpose, and that, when unloaded with a hay-fork, each forkful should be evenly spread over the mow and well tramped. Perhaps the greatest objection to the method is the labor involved, especially in pitching the green hay by hand.

8. Labor-saving Method.—By this method the clover is cut almost any time during the day, but preferably after the dew is off. If it is very rank and sappy the tedder is used, but ordinarily the tedder is dispensed with, especially during the latter part of the season. Towards evening of the day the clover is cut the driest hay is raked with a side-delivery rake, which goes around the field, turning the swaths upside down in a light, continuous windrow, in which condition the clover is left till the following day. The clover that is cut last, and is still green, is not raked until the following forenoon. A heavy dew, no doubt, causes some injury, but since the greenest clover is on the surface, the injury is not serious. The following day, after the dew is thoroughly dried off the clover, the hay-loader is started and the hay taken to the barn, the balance of the previous day's cutting being raked about noon, and sufficient fresh clover is cut to keep the loader, going the following day. Of course, the weather and character of the crop call for modifications of the method, which each man must work out for himself. It is not claimed that this method will make as good hay as where the hay is cocked, but good hay can be made by it, and the saving of labor is enormous, which in these days is an important consideration. A hay-loader cannot be used to advantage without a side-delivery rake. The ordinary dump rake ropes the hay up into a mass that dries out slowly, and leaves the windrows running in the wrong direction to ase a loader to advantage.

Timothy hay can be made by any of the methods described above, but requires less time to cure. The space allotted to this subject has already been exceeded, and there are doubtless some things that have not been made clear. If this article should create some discussion, there will then be an opportunity for further explanation, but in the meantime the subject must be closed.

G. E. DAY.

Ontario Agricultural College.

Cut and Cure Hay in One Day. To the Editor "Farmer's Advocate":

Sir,-I notice in your issue of the 8th inst. an article entitled " Economy of the Hay Loader," containing timely advice regarding the use of labor-saving machines for the successful handling of the hay crop. While I agree in the main with your article, my experience is that it is not necessary or desirable to put the hay in coils nor have it "sweat," but that very much better results can be obtained by rapid curing. For several years past I have endeavored as far as possible to get the crop housed the same day as it was cut, and without it being touched by either dew or rain. I do not begin cutting until the dew is off, and a couple of hours after starting the mower begin to use the tedder, which we keep going during the day, according to crop and weather conditions. In ordinary hay weather, with the aid of the side rake and loader, we can put hay in the mow the same day with excellent results. The quality I believe is superior to that of any which gets the dew or rain or undergoes the sweating process, which is considered so necessary by many agriculturists, and which I believed in myself for many years, until necessity drove me to look for a method with less hand labor. I have not experienced any more trouble in heating in the mow than I did under the former methods of handling the crop. Experience must teach everyone just when the hay is dry enough to go in the mow, and not dry enough to lose the leaves, and curing is quite possible with a side rake and loader, as the driest swath is going in first. My experience is that where the hay is treated in this way, not only is a better quality secured, but it does not need to go into the mow in so dry a condition as that which undergoes dew or rain after cutting, while at the same time the danger from heating is no greater.

SUBSCRIBER.

Open Letter to the Men Folk.

[Sometimes it does people good to have the curtain lifted on their home conditions. Cobwebs and dust and other things very much worse for the wife and mother come to light, and then there is a wholesome cleaning up. A trained nurse, whose duties took her into farm homes, both in Eastern and Western Canada, has been taking notes as she went along, and sends us for publication in the "Farmer's Advocate and Home Magazine" just what she saw and heard. We cannot print it all, and what we do will jar people, who will never believe that such things could be, even rarely, in fair Canada. The writer boldly signs her name, but we do not consider its publication necessary.—Ed.]

I want to inform your readers of what I have seen farmers' wives endure. I also wish to impress upon their minds that those whom I condemn were not unlettered or ignorant men. Several of them were men of more or less local eminence and entrusted with public affairs. It has been my lot to attend their wives during sickness, and I am prepared to prove my statements as being in no way exaggerated, but true in every particular.

First, I will take the -- in hand. wife is a very busy woman, far from well. is very tidy and neat. I see her sitting-room before me as I write. Her hubby comes in with a man on business. They are both reeking of the stable. They go into the room made clean and tidy not five minutes before by a great effort on the part of his wife. He wishes to write. Instead of going to his desk to do so, he shoves back the nicely-arranged cover of the table, upsets a bouquet of flowers, water and all, tears up several sheets of paper, and, ignoring the wastepaper basket, throws them broadcast over the floor. When he gets through, he leaves his chair, also an abundance of barnyard muck, beside the table, and departs, serenely unconscious that he has done ought to worry or annoy anyone.

Now comes the well-read church elder. He is consumptive, and sits beside the wood-box, and every time he coughs the discharge is deposited on a stick of wood, or failing that, he would spit on the carpet or mat, until the sight was disgusting.

Another man, noted for his hail-fellow, well-met" disposition, will sit himself at the front of the stove that his wife has just blackened, and smoke, and spit all over the front door and hearth. I have seen his wife take a floor-brush and wash it after he left, and turn sick and vomit during the operation.

One wealthy farmer I have in mind caused me to faint with the odor he carried into the parlor. He had just been milking, and the cow's udder was all over, soft muck. He had taken his hands and wiped the udder, then rubbed them on his trousers. His boots were covered with the same ingredient. He came right into the parlor without even washing his hands, and sat down on an upholstered chair, while his feet were on a handsome carpet. Anything to beat the stench of that room I never wish to encounter. He was also serenely unconscious of doing anything cut of the way.

I have seen farmers take seed potatoes out of a light cellar and throw them on a clean kitchen floor, to sit and cut them, never doubting but it was the right thing to do. I know one farmer who only changes his underwear once a year. I know dozens of them who have probably never washed their bodies all round since their mothers ceased to do it. I have seen men come in from plowing so filthy that they leave a bed-sheet filthy in one night. I have heard their wives ask them to wash and change clothes for the night, and she was cursed and told he was too tired of such ----- foolery. His wife was an excellent cook and very tidy, also at one time a schoolmam. I wondered if he thought she was not also too tired to bear the burden of seeing her bed made filthy, knowing she had to wash it next day. I could go on until your pages would not hold half, and yet leave volumes untold of the degredation and uncalled-for inkindness I have seen farmers' wives endure.

I fancy some wiseacre, whose hubby dare not say his soul was his own, declare that it is the fault of those women that their husbands do thus