

PRACTICAL FARMING.

HOW FEED AFFECTS BUTTER.

In the transactions of the Highland Society Mr. Speir contributes an article on "The Effects of Food on Milk and Butter," which is a notable addition to the opinions expressed on this controversial subject. Mr. Speir's experiments consisted in the feeding of four cows in the first instance for four to five weeks on different rations, adding a fifth cow when the quantity of milk began to fall off considerably, and a sixth when it fell off still more as the period of lactation approached its termination. The quantity and quality of the milk were not the only points tested for its "churnability" was also determined by ascertaining what proportion of the fat was recovered in butter, and how much was left in the skim milk and the buttermilk. Notice was also taken of the quality of the butter produced from different kinds of foods, and of any increase or decrease in the live weight of the cows. The following are Mr. Speir's conclusions:

First: That at least two foods, young fresh grass and brewers' grains have the power of lowering the percentage of fat in the milk, and that other two, vetches and decorticated cotton-seed cake, have a tendency to increase it. This effect of grains and young grass upon the quality of the milk is well known to all dairymen. In both of these foods it seems to be combined with a tendency to increase the yield of milk and the probability is that the increased flow is the cause of the low quality, so that if judiciously used this effect of both foods may be turned to good account.

Second: That most changes of food seem to be followed by an increase of fat in the milk, but that there is a strong tendency for the milk to return to what may be called its normal condition. The maximum or minimum of fat seems to be reached in about ten days, and within that time the probability is that the milk will be returned to near its normal condition.

Third: That the solids other than fat in the milk seem to rise and fall in much the same manner as the fats although to a less degree.

Fourth: That an increase of oil in the food does not seem to give any increase of fat in the milk. This is clearly shown during the period that linseed cake was used. This food contained quite as much oil as the previous food (oats) yet on only one occasion (second week) did the milk contain a higher percentage of fat.

Fifth: That the effect of food is more marked in the quality of the butter produced than the quantity. Like the fat in the milk, the yield of butter seems to attain its maximum about the middle of the second week, after which it decreases, attaining the normal about the end of the fifth week.

Sixth: That some foods seem to produce milk from which a greater percentage of the fat can be recovered by churning than others.

Seventh: That the greatest difference in the effects of the foods was seen in the quality of the butter. In fact, most foods seem to have some effect in the flavor, melting point, or keeping qualities of the butter produced by their use. The butter from the use of insect cake had a rancid smell by the third or fourth day, while that from the consumption of oats, beans or decorticated cottonseed cake did not reach the same stage when kept in a warm part of the house till about ten days later.

Eighth: That some foods produce butter which retains much more water than others; and butters which have a large percentage of water in them seem usually to be of second or third class quality. Only a few of the butters were tested for pure fat, and it is to be regretted that all were not, for it is evident that the percentage of water a butter contains not only determines its quality, but is also a necessary factor in accurately estimating the churnability of the fat in milk. Like the fat in the milk, the fat in the butter seems to have a strong tendency to revert to near normal conditions.

RAISING CALVES FOR THE DAIRY.

Calves intended for the dairy should be fed so as to develop their frames—bone and muscle—but not to make them excessively fat, writes C. P. Goodrich in *Prairie Farmer*. My way is to crowd them in the way of growth the first year all I can, care being taken all the time not to overfeed so as to impair the digestion. In rearing any animal one should all the time have in view the use that animal is to be put to, so as to fit it by early training and habit for its special life work. Now, the business of a dairy cow is to consume and digest and turn into milk large quantities of milk-producing food, and the more of this kind of food she is able to consume and utilize the more profitable she is as a dairy cow. The best milk-producing foods are what are called protein foods—foods containing a larger per cent of protein than the best fat producing foods do. The ability of an animal to consume and utilize any particular food element is increased by early education and use. If my reasoning is correct the more of any particular food element the calf consumes and digests the more it can consume and digest as it develops a capacity to do so. This same kind of food that will produce the largest quantity of milk is the very kind of food that will build up the calf's frame—that is, make it grow rapidly, if fed in the proper quantities. The calf should never be made very fat and beefy, for this will induce a beef habit that will be likely to cling to it through life, so that when it becomes a cow and is fed high to increase the milk production the chances are that part of it will be turned into beef. The heifer calf that runs with its mother and takes all the whole milk it wants for some months will become fat and permanently injured for the dairy. Skim milk being a protein food is much better to develop the dairy qualities. My

way of feeding is this: For the first week feed its mother's whole milk. After that have part skim milk, gradually increasing the proportion till, by the time it is twelve days old all the milk is skimmed. Feed from twelve to sixteen pounds a day, according to the calf's capacity, always sweet and warmed to blood heat. It is better to feed three times a day, though twice a day may do. Be careful about overfeeding on skim milk when the calf is young. It will not do to feed any more when the milk is skimmed than if it were not skimmed. A little oil meal or flax seed meal, about a spoonful to a feed, made into gruel, is put in to it to make up for the fat that has been taken off from the milk. When the calf is two weeks old it will begin to eat a little good clover hay which should be kept before it, and at about that age it can be induced to eat a little whole oats bran or middlings. The skim milk feed is kept up till the calf is seven or eight months old, increasing the amount of milk somewhat at the same time give all of the hay, oats, etc., it will eat. It is better until the calf is four months old to feed hay with the milk instead of pasture grass. When the calves are eight months old feed in this way they are as large as ordinary yearlings, with large frames and a large capacity for consuming food, but they are not fat! I never feed corn meal to calves, neither do I feed Timothy hay if it can be avoided because these are fattening foods. I am determined to always avoid fattening up an animal designed for the dairy, for in my past experience I have seen too much of the evil effects of such a course of feeding.

WOMAN'S ENERGY.

There is a village community on the coast of Norfolk, England, which may, according to the point of view taken, be regarded either as a particularly old-fashioned place, absolutely bordering on barbarism, or an excessively new-fashioned village, so much ahead of its times as to be somewhat peculiar.

This curious settlement is so far new-fashioned that its women are of supreme importance. They are the bread-winners of the family. That responsibility, taken as a rule by the men, is, in the little village of Stiffkey—which, oddly enough, is pronounced Sukey—assumed by the women as a matter of course. They are fishermen, and support their households—their husbands included—by whelk-fishing on the extensive flats adjoining the village.

It is when one turns to look at the men that the thought arises whether, after all, this peculiar state of affairs ought not to be regarded rather as a relic on barbarism than as an assertion on women's rights. The representatives of the stronger sex, left free from the burden of earning a living, spend their time in lounging and smoking.

A better and more satisfactory—because more necessary—display of woman's energy was shown in the recent experiment made with ninety poor families of the tenement-house district of New York City. When land on Long Island was given them to farm, the one who achieved the greatest success was a woman. She had one-third of an acre, and no more dressing for the land than her neighbors; but she had energy enough to conquer difficulties, and to make her opportunity a stepping-stone to bigger things.

Not content with clearing her own land of weeds, she pulled up the weeds from her neighbor's patches, burned the refuse, and used it to enrich her own portion. At the end of the season she had cleared one hundred and thirty-four dollars, in addition to what had been spent for necessary things.

Now, encouraged by her success, she and her family are saving money to buy a place out of town, where she may carry on her farming to still more profit.

It is not among the poorer people alone that woman's energy is manifesting itself. Even royal ladies are growing tired of inaction, or of those duties which are simply social. Four years ago the Armenian Princess Beglarion went to the University of Berne, where she set herself industriously to study medicine, and from which she graduated with the title of M. D.

Since her graduation she has served in the cholera hospitals of Russia, doing such good work as to call for the personal thanks of the czar. Now she is practising at her father's palace, where the sick for miles around flock to consult her. So fond is she of her profession that she is devoting a large part of her fortune to erecting a hospital on her father's estate.

WEDDING DAY APPAREL.

(By a Confirmed and Cantankerous Celibate.)

Married in white,
You have hooked him all right,
Married in gray,
He will ne'er get away.
Married in black,
He will wish himself back.
Married in red,
He will wish himself dead.
Married in green,
His true color is seen.
Married in blue,
He will look it, not you.
Married in pearl,
He the distaff will twirl.
Married in yellow,
Poor fellow! Poor fellow!
Married in brown,
Down, down, derry down.
Married in pink,
To a slave he will sink.
Married in crimson,
He'll dangle your whims or
Married in buff,
He will soon have enough.
Married in scarlet,
Poor victimized varlet.
Married in violet, purple or puce,
It doesn't much matter, they all mean
the deuce.

AT THE WRONG PLACE.

Who was that fine looking gentleman at the door, Jane?
I don't know, mum. I told him that he had called at the wrong house.
How in the world do you know he did?
Because he had no bill to present, mum.

YOUNG FOLKS.

TWO KINDS OF BOYS.

Two little boys I have in mind—
Equal talents in each you'll find;
Mischievous, to sport inclined,
And full of noise,
All these, and more, are here combined
In my two boys.

One of these boys your patience tries;
The faults he has you must despise;
Be he handsome, well clothed or wise.
Tall, fat, or gaunt;
It is the one who always cries:
"I can't! I can't!"

Instead of doing with his might
All that he can before the night,
He'll try to push it out of sight—
To sulk and shirk;
One-half the force expended right
Would do his work.

The other is a little man,
Who lays his work out by a plan,
Thus getting done all that he can
As moments fly;
He has no other motto than:
"I'll try! I'll try!"

In heat or cold, in shade or sun,
All that he does is promptly done;
But when it's o'er and leisure won
He plays his best.
This is the boy that has more fun
Than all the rest.

Which will you be, my bonnie lad?
The friends of one are often sad.
The other makes his always glad
By loving work;
So choose the good and shun the bad,
And never shirk.

WISE ANIMALS.

A correspondent of *Humane Journal* tells this tale about a knowing little Scotch pony he came across in his travels:

Many years ago I spent my midsummer holidays at Dalnacardoch, about ten miles north of Blair Athol, in Perthshire. The Highland railway had not as yet laid down its lines among the valleys of the Grampian Hills. On the day previous to my return homewards, the friend with whom I resided suggested that I should borrow old Donald McKay's old pony, and pay a farewell visit to some of the farmers and shepherds whose acquaintance I had formed during my stay. The pony was most willingly placed at my disposal, and I set off.

When the twilight was gathering over the mighty hills, I sat in my saddle at Niel McKerrachar's door, bidding him and his family good-bye. Neil was loath to part with me, and detained me so long talking about many things, that twilight was giving place to night when we parted. The stars were coming out as I rode down the bridge path that wound along the glen. I had a journey of about seven miles before me ere I could reach the highway which lay far beneath me.

Suddenly a thick mist obscured the stars, and the narrow path disappeared in the darkness. After proceeding a few yards the pony stood still, and all my attempts at coaxing him forward failed. I had read many stories of the sagacity of horses and ponies finding their way home, so resolved on testing their probability. I laid the reins on the pony's neck, and had no sooner done so, when it turned aside from the bridge path and struck out a path for itself, through the tall heather along the mountain side, traveling slowly and never once making a slip or false step.

Instead of, as I expected, carrying me to the door of its master, it drew up in front of that of my friend, where I had mounted it in the morning. I was about to take the pony back to Donald, whose house was about a mile distant, when my friend said that such a proceeding was unnecessary. He called out in Gaelic to the pony, "Good-night, Rory, trot away home," and neighing a "good-night" reply, off went "Rory" across the moor, and was at once lost in the darkness.

Found next morning that he reached his master's cottage a few minutes after taking leave of us.

Another traveler relates in a London paper how he became convinced that dogs can understand what is said in their hearing, and have intelligence and sometimes more than human kindness: Several years ago I had a beloved mongrel fox terrier named Joe. We were staying some months ago at Penzance, and the dog went everywhere with us and knew the place well. One day we were, as usual in the afternoon, on the club tennis ground, when the secretary came up and warned me that on the following day, as there was to be a tournament, no dogs would be admitted to the enclosure. I promised to shut Joe up at home. That evening we missed the dog and in the morning also he was not to be seen. When we went back to look on at the tournament in the afternoon we found Joe waiting for us; the ground man told us that the dog had been there all night and would not allow himself to be caught. He had never slept out before and he certainly must have understood what was said.

We often used to say: "We will drive to such a place to-day, but Joe must stay at home," and almost invariably, in whatever direction it might be before we had driven a mile, we found Joe waiting for us by the roadside. He always grinned when we came up with him.

Thirty years ago I was living in St. George's square, Pimlico, and near me—in Denbigh street, at a distance of about ten minutes' walk—resided a well-known journalist, Percy Gregg. He had a little black-and-tan dog, for which I found a home when his master was about to leave London.

It was reported to me that Jimmie always left my house after breakfast. At first alarm was felt that he would stray, but as he invariably returned on an hour's stroll, I took him to be one of those "vagrom" animals who cannot live without a prow in the streets and I felt no anxiety. But I ascertained that whenever he went away he carried a bone or something edible with him.

I watched him one or two mornings and saw him squeeze through the area railings, on each occasion carrying a big bone, which he had great difficulty in steering through the iron bars. Being curious about the destination of the food, I made up my mind to follow him.

I tracked him to an empty house, next to that in which his former owner had lived. In a cellar in the area there lived a half-starved, ownerless terrier, who I supposed had once been a friend of Jimmie's, and whom my dog in his days of prosperity never forgot. Regularly the good little fellow trotted off to the cellar and divided his morning's meal with his poor friend.

The story is told of the great Napoleon riding over one of his battlefields—I don't know whether it was Wagram or Austerlitz—and pointing to a faithful dog watching over the dead body of his master, with the words: "That dog teaches us all a lesson of humanity." So did Jimmie.

ADVICE TO BOYS.

Boys, did you ever think why you were placed here? That you are the noblest work of your Creator? By you the world is to be ruled. On your shoulders will rest the greatest responsibility. You are not placed here to while away your time in idleness, satisfying your own desire for fun. You have an intellect which should be fed on the choicest of thought. Many do not try to gain knowledge, the only true course to manhood.

How mistaken some boys are as to what will make a man of them. How degrading are some of their habits, viz: swearing, drinking, card-playing and flirting. I once heard a young man for whom I had entertained the greatest respect, use such vile oaths, while in a fit of passion, that I shuddered when I heard him. Could I have the same respect for that person as I had before? No. What young lady would choose such a person for her company?

Drunkness is one of the most ruinous habits of mankind. Who ever heard of a person who, when he has contracted the habit of drink, ever entirely recovered from it, so as to abstain from the use of it altogether? It is far better boys never to take the first drink. Perhaps it will cost you a whole life of misery. Dancing and card-playing are bad habits, for there is nothing in them which would elevate the mind. On the contrary, they are degrading and the time so used is lost, yes, worse than lost, for they are enticing and lead to lower acts.

Flirting is one of the worst of habits. How often the life of a pure, noble young person is blighted just because some one wished to add another to the number of his conquests. Such a person is not fit for a lady or gentleman to notice. I have in my mind a young lady who was courted, wooed and won by a—shall I say gentleman? You may call him what you may. Ere she knew it he had married another, and before six months had passed she lay in her grave—died of a broken heart. Could any one suppose that man could ever be happy afterward?

Boys, if you ever expect to marry, be a man. Don't flirt. And when you see a young lady whom you know you love, tell her so, and I am sure if you are what you should be, you will win her. In that case your life could not help but be of the happiest.

Old Bach.

KAFFIR DENTISTRY.

How Molars Are Extracted in This Section of Africa.

The methods of extracting teeth among the Kaffirs are barbarous in the extreme, and remind one of the tortures of the dark ages.

The patient is placed on the ground, and four men are employed to hold him down, two taking his arms and two his legs. Then the operator kneels down beside him, and taking a piece of sharpened ivory, steel, or wood, he calmly proceeds to hack away at the gum until the offending tooth is loose. He then extracts it with finger and thumb, the patient having suffered naturally unspeakable agonies.

The time occupied in the operation is often of long duration, sometimes extending over as much as 30 minutes, but, of course, this varies according to the strength of the tooth. Persons in this country who make a practice of taking an anæsthetic when having a tooth extracted would probably find the operation as performed by the Kaffir dentist a little troublesome, to say the least of it.

A SONG OF EXILE.

Mine no more! . . . For other eyes
All thy beauties now are spread,
All the rapture of thy skies
He then the winds laugh overhead,
All the boundless moorland ways
Purple with the heather bloom,
Dusky woods, and hills ablaze
With the glow of yellow broom.
Careless feet will come and go,
Only I that loved thee so,
Wander on an alien shore—
Oh, my country, mine no more!
Mine no more!

Still I see in haunting dreams
Loch and glen and valley fair,
Hear the roar of mountain streams,
Feel the rush of moorland air;
Every northern wind that blows,
To my heart some message brings;
Every bird that northward goes
Bears my greetings on its wings.
Happy winds and wild birds free!
Would that I, like you, could flee
To that land beloved of yore—
Oh, my country, mine no more!
Mine no more!

MAKING A RECORD.

Officer, I want you to lock me up for shooting game.
Well, where's the game?
Oh, I haven't hit anything; only I want my friends to think I have; and if you'll have my conviction inserted in the "Evening Snoozer" I'll give you a fiver.

A STUBBORN MALADY.

What nervous disease did Dr. Goodhead say your husband is suffering from?
He called it "catching trains."

COULDN'T BE HER.

Miss Kissam—You seem depressed tonight, Mr. Dexter.
Mr. Dexter—Yes, I am. I went to a fortune teller to-day to find out my fate and was told that the girl I loved would not marry me.

WHAT UNCLE SAM IS AT.

ITEMS OF INTEREST ABOUT THE BUSY YANKEE.

Neighboring Interest in His Doings—Matters of Moment and Birth Gathered from His Daily Record.

Mrs. Annie L. Webb is the only woman in Idaho who is in the life insurance business.

The daily shipment of celery from Kalamazoo is 80 tons, an unprecedented amount for this time of the year.

The members of a hose company in Saginaw, Mich., have equipped themselves with helmets of aluminum.

The sale of oleomargarine, when colored to imitate natural butter, is now prohibited by the laws of thirty-two States.

Telephone rates in Chillicothe, Mo., have been reduced to \$18 and \$24 a year respectively, for residences and business houses.

The colored people of Baltimore have started a movement for the erection of a monument to Mrs. Harriet Beecher Stowe's memory.

The sun, if hollow, would hold 300,000 earth globes, and an eye capable of hourly viewing 10,000 square miles, would require 55,000 years to see all its surface.

There is a scarcity of "subjects" in the Atlanta Medical College, and under an old law the faculty has demanded that the bodies of paupers be given to the students for dissection.

The statue of Edgar Allen Poe, which is to be set up in Bronx Park, New York, by the Shakespeare Society shows the poet seated in an armchair in meditation, with a raven at his feet. The statue is of heroic size, and will rest on a granite pedestal.

A coloured teachers' institute in Georgia has asked the State authorities to provide them experts of their own race to instruct them instead of white teachers. They also object to Bill Arrp's "School History of Georgia" as abounding in untrue statements about the negro race.

There has arrived at Yakima, Wash., a combination harvester and thrasher of immense size, to be used in harvesting a big crop of wheat. The machine will cut a 20-foot swath, thrashing and sacking the grain as it goes, and will require thirty horses to pull it.

Newton F. Hurse, 24 years old, is a grocer's clerk in Buffalo, and gets \$5 a week wages. Some time ago he invented a car-coupler, and last week he received a letter from a manufacturing firm offering him \$50,000 in cash and a royalty of all couplers sold for his invention.

A Nodaway, Mo., County boy, only 11 years old, confessed himself a thief to the local authorities the other day, and took them to a hiding place where he had concealed numerous articles of value which he had stolen from residents of Hopkins. He was let off with a sentence of one day in jail.

Nowadays the plumbers of Laramie City, Wyo., are kept very busy looking after private water pipes, which become choked up. In nearly every instance the trouble is caused by fat-sized trout which in some manner continue to get in the big main and from thence are carried into pipes running to private residences.

The Liberty bell at Philadelphia cracked while being tolled July 8, 1835, to announce the death of John Marshall, chief justice of the Supreme Court of the United States. The bell was cast in London in 1752, broken up and recast in April and in June, 1753, so it was 82 years old when it cracked, and had some hard usage. The crack probably came naturally.

A. B. Jones, of Newnan County, Ga., is 72 years old, has a wife to support, and only has one arm with which to work. He owns a little home of twenty-seven acres, all uplands, and yet on this he is making a good living. He raises no cotton, but has an abundance of corn, meat and the usual farm supplies. He is independent and out of debt.

Leman Bishop, an old coloured man, while out in the woods near his house, beyond Crawfordsville, Georgia, heard a partridge whistle and thought he would kill it; but while looking for his bird he found the whistler to be a black snake in a brush pile with his head above the brush, whistling in perfect imitation of a rooster partridge.

What is believed to be the celebrated Swift silver mine has been discovered on Round Stone Creek, thirty-five miles south of Richmond, Ky., in Rock Castle County. The ore is combined with lead and smelts at \$65 a ton. Down several feet below the top ledge were found crucibles and other implements, which leads to the belief that the mine had been worked in past years.

The water in the Columbia River Oregon, is so cold that it is dangerous to swim in it. Frank Thornberg was swimming in about 15 feet of water when cramps suddenly seized him and he sank. Reaching the bottom by a vigorous movement he kicked himself to the surface again, but, being powerless to move his arms, sank again. Seven times he sank and rose in this manner before a boat reached him and drew him in.

Two men in a rowboat fought for their lives amid a school of ten whales recently off Newport Beach, Cal. The men were camping at Newport and had gone out for a fishing trip in a rowboat. Having found a good fishing ground, they were pulling in yellow tail and barraconda, when suddenly what appeared to be an island arose from the water alongside the boat. Whales then appeared on all sides, and, after being in the school for some time, the leviathans swam away, leaving the frightened men at peace.

The receipts of salmon at the various Oregon river canneries continue unusually heavy, and are far in excess of the capacity of the packing establishments. Tons of fresh fish are being thrown overboard on account of the lack of means to preserve them until they could be canned. As many as possible have been salted for winter use by citizens, the fish being freely given to all who would carry them away. Fishermen assert that never since the canning industry began has such a run been seen.