GLASS VESSELS IN THE DAIRY.

H. L. Shiepts, of Bennington county, Vermont, gives the *Country Gentleman* the following account of his experience, which is at least novel and interesting: For some years past I have been much interested in the milk and butter question. Having some good Jersey cows (thorough and half-bred), sweet mountain pasture, abundance of cold spring water, a good dry milk-room—above ground—and an excellent cellar, I determined to experiment until I found the best means of producing butter of the finest quality. I tried shallow open pans, and deep cans, in air and in water, in the milk-room and in the cellar, but found objections to all. Cream rises rapidly to the surface from milk set in shallow pans, and dry, cool atmosphere, but the milk soon sours, and the greater surface of cream exposed, the more flies and specks to be removed. Again, too much room is required to set the pans, and too much pan-washing and airing for comfort. Deep cans produce perceptibly *no more* cream for the amount of milk set than shallow pans, and if they did, the increased difficulty of skimming the deep cans balances the gain. If cans or pans are set uncovered, in running water, they are liable to the same insect annoyance. If covered by wire or other gauze, time, space and cost make this course unavailable practically.

In my cellar the thermometer indicates 58° to 64° in the hot months, but the dampness or some other (cellar) cause allows the cream to rise very slowly. The insect trouble also exists there partially, and cream has a tendency to absorb odors, and tastes of everything emitting smell—even to the dampness of the cellar itself. Refrigerators, to hold the cans, will not obviate all these troubles. They are not air-tight, and are generally kept in cellars, besides being costly in themselves and in the ice they consume. Much less would it answer to keep running water iced down to the temperature of 40°.

I concluded that vessels of convenient size and shape, constructed of material impervious to all atmospheric influences save those of temperature, would be most fitted for setting milk. I accordingly had some large glass jars made, so constructed as to give the greatest strength, with wide mouths into which are fitted air and water-tight corks. The jars are about eight and a half by seventeen inches. For protection and facility in handling, they are placed in pairs in crates, resembling peach crates. The milk is strained directly into jars, above ground, to avoid any damp cellar air being ileft in them. The mouths are closed, air and water tight, by the corks, and the jars are then put, bottom side up, into the water, the hinged lid of which is then closed and fastened, and set into the coldest available place in hot and warm, or cold weather—on the cellar floor, in the water-box, or the crates may be hitched to the bucket-chain and lowered into the well for any desired length of time. In these jars milk will be sweet after setting 24 to 36 hours, and is drawn off from beneath the cream by a small tube or a siphon, thus avoiding all skimming. For churning, I first used a rectangular box, with a revolving dash of certain construction. It churned well, but took too long to cleanse afterwards. I tried the old earthen ware dash churn, which was good, but slow, liable to breakage, difficult to scrape out and ventilate, and requiring too much muscle. Then we used the semi-barrel-shaped wood churn, with revolving dash, but found the same trouble that all wood churns must have—difficulty in keeping sweet and clean, and splintering when scraping. Now I use a glass churn. It consists of two, four or six of the before-named large glass jars, set upright in a partitioned, rectangular box, resting and revolving on an axle, and set on a light frame about three feet high. The jars are not quite filled with cream, the corks put tightly into the mouths of the jars, the hinged-lid closed and fastened, and the box is then revolved by a crank at the end of the axle.

I find that this churn can be operated with the smallest force, if properly balanced; that in revolving, all the cream is thoroughly and equally shaken by its dashing against the top, bottom and sides of the jars; that the moment the butter comes, it can be seen through the glass, and the buttermilk poured off; that the butter can be washed in the jar, or can readily be emptied out for working, as the opening is ample; that any butter adhering to the sides or bottom can be easily scraped off without risk of splinters; that the jars can then be rapidly and thoroughly washed, and it can be seen that they are clean; that there are no joints, corners, metal or wood gears, or cogs to clean; that it admits of thorough airing and soon drying; that being barrel-shaped and arched at top, bottom and sides, it is strong in form, and can only be broken wilfully, or through great carelessness in the use of hot and cold water; that the cream can be tempered alike, and to any degree, by setting the jars in a tub of hot or cold water; that it is durable, not liable to get out of order, and cheaper, I think, than any churn made. If as many, or more desirable points exist in any other mode of setting milk and making butter, I should be pleased to know of them.

BURDETTE, the funny man of the Burlington *Hawkeye*, is as noted at home for his tender care of a sick wife as he is for his originalities.

GIVE THE GIRLS A CHANCE

Yes, we repeat it, give the girls a chance; and we will tell you what we mean by it. We mean, give them a chance to learn all kinds of housework, from the dusting of the grand piano in the luxuriously furnished parlor to the cooking of meat and potatoes and washing of dishes; and we warrant you they will be willing and glad to do it, too. What if they do spoil the first meal they attempt to cook? Tell them to try it over, and encourage them to persevere. Fear of ridicule keeps many a girl from learning housework. We have often stepped into a house and found the daughter thrumming on the piano, or engaged with some fancy work, while the mother was cooking or washing. Now a great many persons would have exclaimed, "What a lazy, good-for-nothing girl, playing the piano while her mother is at work," but we did not. We have found out the cause of this, and, in nine cases out of ten, it was the mother's fault. She would not allow her daughter to help her, and, when asked her reasons, her answer has invariably been: "Oh! she is more of a hindrance than a help; she only musses and wastes." Now, who could expect a girl to do anything else but muss and waste, when she has never been shown how to do anything? Would not we think a person insane who required a child to sit down at a piano or organ and execute the most brilliant and difficult music, without any previous teaching? Most assuredly we would; yet the idea would not be any more ridiculous than to expect a young and inexperienced girl to go down to the kitchen and prepare an excellent dinner in the same style and time that an old and experienced cook would.

We do not think it any kindness on the mother's part to keep a girl in ignorance of the different kinds of housework. This is one place where ignorance is not bliss. What will the poor girl do when she has a house of her own? It will then be ten times harder for her to learn than it would have been at home, under the guidance of her mother. Even if she should be so situated as to have servants, it would be better for her to understand the mysteries of the kitchen. Besides, fortune is fickle, and we have no assurance that we will always be surrounded by the wealth we may have at present. We may have every luxury to-day, and to-morrow be poor. I appeal to the mothers of our land to teach their daughters all kinds of housework, for their own happiness, and the happiness of future generations.—*May Myrtle, in Rural Press.*

STEERAGE DIET.—Each emigrant has a contract ticket which stipulates for his transportation to New York in consideration of four, five or six guineas, according to the current rate of fare. The company engages to provide a full supply of wholesome provisions, cooked and served by it stewards, and the passenger is required to provide himself with bedding and cooking utensils. The weekly allowance of food for each adult is prescribed by the government and printed on the contract ticket as follows: "Twenty-one quarts of water, three and a half pounds of bread, one pound of wheaten flour, one pound and a half of oatmeal, rice and peas, two pounds of potatoes, one and a quarter pounds of beef, one pound of pork, two ounces of tea, one pound of sugar, two ounces of salt, pepper, mustard and vinegar."—*Scribner.*

THE Chicago *Journal* asks in a towering rage "Shall we as American citizens pay for thumbs by the pint and quart and not get them?" If they are measured in your berries you ought to have them.

SHAKESPEARE asked "what's in a name?" We can't always tell, but some of the Eastern names have two alphabets in them.

ONE of our pious exchanges tells us "there is no balm in Gilead that will soothe the spot whereon a bumble bee has sat down."

WEED SEED ON THE WATERS.

A theme for essayists has been the influence of rivers on civilization. It is a grand subject for the student of history, for he has many facts to weave into his theories of the spread of conquest, of arts, and of ideas, up and down the navigable streams. Ours is a different task; for although the rivers carry conquering heroes, and pioneers, and traders, and missionaries, they are none the less freighted with minute seeds and germs of life, which, falling upon the moving current far up amid the wilds, are tossed at last upon fertile meadows, there to reproduce the noxious growths from which they sprang. Thus not only weed seed but plant-destroying insects are disseminated. Thus the rivers, which bring life-giving water, often bring evils upon its flow.

As with torrents so with rills; light burdens are faithfully delivered, and the brook and the rivulet becomes a thoroughfare for weed seed as well as the mighty river. The tall rank weeds beside the stream continually nod their salute to passing water, and when their seeds are ripe, sprinkle the passing flood with them. Wherever this water goes, there goes the tiny promise of a weed. Whether it be between the rows of vines or trees, or garden growths, or whether the water spread in gentle flow over the growing grain or pasture plants—in every place it lays down its burden, where its own inherent energy will call upon it to rise again. Weeds growing by the roadside, weeds growing by the railway track—these are dangers great and sure reservoirs of weed seed enough to stock the neighborhood; but weeds beside the running streams are surer of securing rapid transit for their seed and safer deposition of it. The suggestion is to keep these fertile river banks clear of evil growths, to guard well the ripening of the seed in every noxious plant which springs into life beside them. In many parts it will require no little work to accomplish the desirable result, but by all means do not neglect an effort now which will save a hundred times the labor in a year or two to come.

In all countries where irrigation has been practiced has this evil of weed seed distribution to be met. In Colorado the evil is well under way. A farmer riding along the Platte and Bear valleys sees the danger of the dwellers, and writes these words of caution and advice to the farmer: "The irrigating ditches are lined on both sides with noxious weeds, which impregnate the water with seed to that extent which makes a ranch using water from them so weedy that it is impossible to keep the ground clean and in good condition for grains or other crops. Even meadows are made weedy yearly by this influx of fresh weed seed. The above condition arises from the fact that the banks of a ditch cannot be mown with a machine; that the moisture found there is especially productive of vegetation, and the annual varieties of plants are propagated by the current, which deposits the seed wherever it flows. To prevent this, trees should be planted where they would shade the banks of the ditch, especially wherever a mowing machine cannot operate." Of course there are exceptions and cases in which the ditch is best kept free from tree growths, but in others there are decided advantages in the planting of trees. Not only will their shade prevent the ripening of seed in whatever weeds insist upon a sickly life, but in dairy pastures the trees will serve a useful purpose in giving the cows a cool ruminating spot, and their frequent visitations will in turn give the ditch bank the smoothness and hardness of a floor, unless it be in earth of treacherous character where the tread of animals would destroy the banks and tread the bed into a slough hole, and thus impede the progress of the water. Though counsel for trees would be of special application, there is no exception in the wisdom of keeping the banks clean of foul weeds, in whatever way it may be best accomplished.

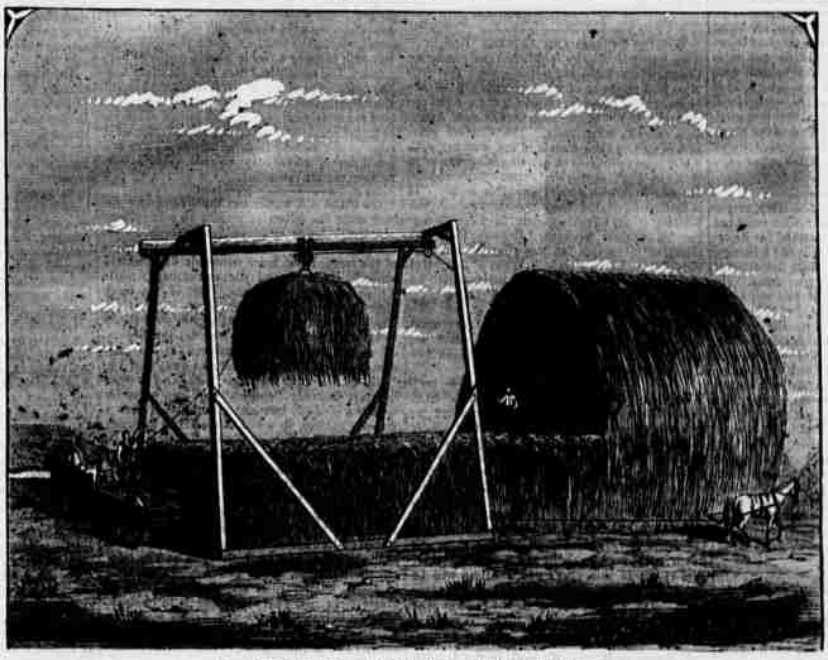
As to the carriage of insects by running water, nearly every one, doubtless, has instances in his own mind. Who has not seen the little voyagers sailing along on chips or rubbish, careless of the length of their passage, having little fear of the great ocean beyond, but fully confident that their vessel will be stranded near some fruitful fields? In a letter from Chili we read as follows concerning insects and irrigation ditches: "Insects also float down the running streams and become scattered over the land; and in reference to this, the alfalfa stalk is generally covered with a minute black insect, and when this plant is irrigated they are often washed into the canal and form long black streaks on the side that at first sight would appear to be soot, but in thrusting a stick into their midst and drawing it out, it will be found covered with this vermin, so destructive to vegetables."

Thus it will be well to remember that our brooks may bring us evil with the good; and though there may be some visitations it will be hard to guard against, there are others which may be avoided by attention and thorough work.

STACKING THE STRAW.

Although it is late to think of new arrangements for stacking either hay or straw from this harvest, it will be well to make a point that is worth bearing in mind and preparing for next year's use.

We hear of the use of a new stacking frame among the farmers on the prairies—a frame which any one or any one's carpenter can make, for the inventor gives his right to any one who wants to use the apparatus and has not patented it. Our engraving shows this frame. The sketch was made for the U. S. Wind Engine and Pumping Company, of Batavia, Illinois. This company, finding there was a demand for the new style of stacking frame, undertook the manufacture of the iron parts of the arrangement, and they have an anti-friction carrier, which carries the fork and its load in a most satisfactory manner.



A HOME MADE FRAME FOR FIELD STACKING.

There are several advantages in stacking with a machine like that shown in the engraving. Hay stacked in the field by the use of carrier and frame will keep better. The hay is all dropped in the middle of the stack, and the middle becomes packed hard while the outside remains loose. When the stack settles, the middle remains the highest, and it sheds water. The stack is not so likely to lean, as there is no occasion for tramping on the outside of it. In every respect it facilitates work and does it in a more workmanlike manner.

That the frame is very easy to make and very cheap can be seen from the following description of the necessary parts. The frame for ricking in the field should be about 20 feet high, the pairs of posts should be about 8 feet apart at the top and 18 feet apart at the bottom, and well braced. The following pieces of lumber will be needed, or poles can be used: 7 pieces 4x4x20 feet; 8 pieces 2x4x16 feet; 1 piece 2x6x16; 1 piece 2x12x22 feet. Track is put on to 2x4, as in tracking barn. The 2x4 is nailed on the side of the 2x12. The timbers should be halved and bolted or framed together and well braced as shown.

From the workmanlike shape which the frame shows and the many testimonials which we have heard of its usefulness, we have no doubt it will prove a help to some of our farmers as well as to their compeers in the Prairie States. If any reader should wish to make inquiry concerning the iron fittings and other details of construction, we doubt not the company named above will be pleased to furnish the information.

INFORMATION ABOUT WOMEN'S WORK.—Women who are engaged in trades, professions, literary, educational, philanthropic, or religious work, or in any kind of industrial occupation, and who would help to hasten the solution of the "Woman Question," will please write concerning their success during the past year to Frances E. Willard, Evanston, Ill. This request is made for the purpose of securing all possible information relating to what women have attempted in the way of self-support, or as a beneficent vocation, believing that the information will be of practical value, and will serve as an incitement to more earnest work. Miss Willard is Vice-President for Illinois of the Woman's Congress, which holds its annual session in Cleveland, October 10th, 11th and 12th, at which time reports are to be given by the Vice-Presidents concerning the States they represent.

AN Iowa youth tried to take home a widow and three swarms of bees at one load. He and the widow walked—it was so pleasant, you know.

IT is said that the Nez Perces took their style of ringing the nose from seeing the hook so often in a salmon's nose. We thought they usually speared salmon and hooked horses.

MEMORY is the cabinet of imagination, the treasury of reason, the registry of conscience, and the council-chamber of thought.—*Basile.*

MEMORY is the treasure-house of the mind, wherein the monuments thereof are kept and and preserved.—*Fuller.*

ENGLAND has put up a potato bug notice. If he lands on British shores he will be treated as a Fenian.