FORTUNE SEEKING EMIGRANTS.

Many a poor family that seeks the western wilds in the hope of winning a fortune, is prevented from that insidious foe of the emigrant and frontiersman—chills and fever—by Hostetter's Stomach Bitters. So effectually does that incomparable medicinal defense fortify the system against the combined influence of a malarious atmosphere and miasma-tainted water, that protected by it the pioneer, the settler or the tourist provided with it, may safely encounter the danger.

Immense deposits of asbestos have been discovered in the Ferris range of mountains in Carbon county, Wyoming.

There is no substitute for thoroughgoing, ardent and sincere earnest.

Improved Pull for Doors.

The cut shows an improved way of using the card and wheel pull for doors. The door jamb is made very wide by nailing on a piece to the ordinary jamb. In this, insert a small pulley wheel at a slight angle, so that the rope will not pull so much across the edge of the wheel when the door is wide open. The weight runs up and down upon the back side of the jamb. The door should move easily so that as light a weight as possible may be used. Then the door will open easily, and yet pull to with great promptness. With all inside barn and stable

DEVICE FOR CLOSING DOORS.

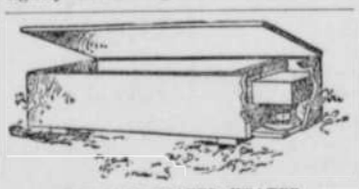
doors fixed in this way, much trouble, and often loss, will be avoided by cattle and other animals getting into forbidden quarters, because of doors carelessly left open.—Orange Judd Farmer.

A Sensible Suggestion.

The middle-aged woman, or one whose children have grown past the destructive age, should get the comfort there is in the pretty things which she has accumulated. She should not hoard her embroidered table decorations, keep her silver wrapped in cotton flannel bags or the sofa pillows put away for fear they will be worn out by use. Now is the time to enjoy them. If she thinks that it would be better to keep them for the children she should remember that when these things fall to their possession they will be out of date, but not antique enough to have any value beyond the sentimental one that "they were mother's." Most grown-up children take a pride in seeing their mother's home up to date; if they do not they certainly do not deserve a legacy of what might have made their mother's life more comfortable and more enjoyable.—Grange Homes.

Warming Water for Stock.

A plan for warming the water for stock during cold weather is shown in the engraving herewith. One end of the trough is partitioned off, and over a square opening in the partition is tightly fitted a galvanized iron box,



HOMEMADE WATER HEATER.

the water flowing freely out into this iron box. Under this iron box a small oil stove is placed, admission being had by means of a small door in the front of the trough. With a tight cover, the water in the trough can have the chill removed very easily. It is especially important to have the iron box as low down in the trough as possible, so that the water at the bottom of the trough may be warmed, as well as that at the top. If possible, then, let the end compartment extend below the main body of the trough, so that the iron box may open into the lower part of the trough. As the water is heated, it will rise, and the colder water from the bottom be drawn in, to be heated in its turn.—American Agriculturist.

Waste of Corn Fodder.

Early husking of corn is important to save its grain from being wasted by mice and other vermin. But after the corn has been husked the stalks have a new surface exposed to rains. As they are then partially dried, the stalks should be got under cover as soon as possible. If the stalks are wet after being once dried, the waste from rotting goes on much more rapidly than before. If the stalks should heat somewhat in the mow this is better than to leave them exposed to further injury by storms, with little chance of drying out, except as it will be frozen dry by the cold of winter. This freezing of wet stalks takes from them most of their feeding value.

The Quality of Timothy Hay.

One reason why timothy hay is a favorite in the markets is its uniformity of quality. Not being so nitrogenous as clover, it is much less likely to be injured by being wet and heating. The variation in quality is mainly due to early or late cutting, though some livery stable keepers prefer the fully ripened timothy, which is least nutritious because the horse likes the timothy seeds. Clover hay is very apt to become musty and dusty if it has been exposed to fermentation. Timothy hay will not be dusty unless cut in the bloom, and the dust is not so injurious as that from partly decayed clover.

The Farm Mouser.

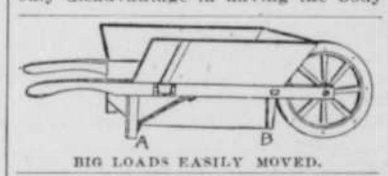
Mice are a great menace to the farmer's premises. They gather from the fields as autumn approaches, and build nests in stacks and under piles of rubbish and in every available place they can find shelter. These pests must be baffled in every way possible. A few good cats are about as successful mice exterminators as can be found. Some farmers try poison, and we have written many items recommending poison; telling farmers how to arrange them, and the poison box is still worth trying in the small fruit orchard, but experience proves that there is nothing so effective in ridding the farm of mice and keeping them away as a good cat or two. We have experimented with poison in many forms and have noted a partial success in the way of thinning out mice, but when the cat made its appearance, the mouse problem was soon solved. We unhesitatingly recommend keeping a cat or two on every farm.

Sweet Apples for Horses.

A quart or two of sweet apples per day for each horse will be worth more to it than the same bulk of oats additional to its regular ration of hay and grain. The apples are better than any kind of roots, and this year they are everywhere cheap and plenty. Sour apples are nearly as good, but the horses prefer the sweet apples when they can be had. In nutritive value there is very little difference. There is much sweet in what we call a "sour" apple, which is only called "sour" because an acid disguises the sweet it contains.

Handy Style of Wheelbarrow.

A deep wheelbarrow is more useful than one built on the old plan, because it will hold more, and the work of building such a barrow is not much greater. Any one who owns a wheel and irons belonging to an old wheelbarrow can easily construct one by first procuring two stout pieces for the shafts and mortising them together firmly just behind the wheel. The next mortise must come 2 inches from the ground on the legs at A. From this mortise the floor of the barrow must reach forward to B, where it is supported by two false legs mortised into the shafts and reaching within 2 inches of the ground. The sides may be solid from the floor up, or if preferred they may extend only to the top of the shafts, and from this point movable side boards may extend upward. The only disadvantage in having the body



BIG LOADS EASILY MOVED.

solid is in being forced to remove most of the load from between the handles. This wheelbarrow is especially useful in carting leaves, etc., and in handling heavy stones, which are loaded upon it with ease, because so near the ground. If one desires he may arrange a movable bottom, which will permit the load to be deposited without tipping by merely raising the handle.—Farm and Home.

Watering Plants in Winter.

There is far more danger of giving house plants too much rather than too little water in winter. During the short days and long nights, with very little sunlight on the soil, it is hard to keep it at a temperature where the plants can grow vigorously. All the surplus water added lowers the temperature until it reaches a point where the plants barely exist without making any growth. If the soil has much vegetable matter, humic acid will be developed at a low temperature and this will poison the plant roots.

Saving Dry Road Dust.

One of the jobs which should be attended to before cold weather is to save a few barrels of dry road dust to be used as dust baths for hens in winter. Nothing contributes more to the health of hens than this. Coal ashes will answer, but they stick to the feathers of fowls worse than road dust will, and give the birds an unsightly appearance. The road dust is coarser, and we think the fowls like to roll in it better than in the white, fine dust that comes from sifting coal ashes.

Phosphate for Clover.

Whenever phosphate is sown with grain, a part of the fertilizer is always appropriated by the clover seed sown with it. Clover is a lime plant, and it also needs the phosphoric acid that is so helpful to the wheat. The phosphate is especially valuable when applied to clover that is to produce a seed crop. Potash is also needed to make clover seed well, and should be applied in some form.

Origin of a Much-Quoted Saw.

The origin of "A fool and his money are soon parted" has not been ascertained with certainty, but the following story is sometimes told: "George Buchanan, tutor to James IV. of Scotland, made a bet with a courtier that he (Buchanan) could make a coarser verse than the courtier; Buchanan rose, and picking up the courtier's money walked off with the remark, 'A fool and his money are soon parted.'"—Ladies' Home Journal.

Telephone Wires and Lightning.

Telephone wires seem to have an important influence in preventing lightning from striking, according to the investigation of the German Telegraph Department. Three hundred and forty towns with telephone systems and 500 towns without them were under observation. In the former lightning struck three times for every hour of storm; in the latter five times. Moreover, the violence of the lightning was much less in the former cases.

Little Farms in Japan.

Japan, and not France or Belgium, would appear to be the land of petite culture. According to a recent American bulletin a couple of acres is considered a large tract for farming purposes. Most of the farms are smaller, and on a little plot a surprising variety of crops is cultivated—a few square feet of wheat, barley, maize and millet; a plot of beans perhaps ten feet wide by twenty feet long, a similar area of potatoes and peas and a patch of onions "about as big as a grave;" beetroot, lettuce, turnips, sweet potatoes and other crops occupy the rest of the area. The farmer examines his growing crops every morning, just as an engineer inspects his machinery, and if anything is wrong he puts it right. If a weed appears in the bean patch he pulls it up; if a hill of potatoes or anything else fails it is at once replanted. When he cuts down a tree he always plants another. As soon as one crop is harvested the soil is worked over, manured, and forthwith resown to another crop. It is estimated that nine-tenths of the agricultural land of Japan is devoted to rice, and as this is a crop requiring much water the paddy fields are banked up into terraces, one above the other, and divided off into small plots twenty-five feet or thirty feet square, with ridges of earth between them to prevent the water from flowing away when they are flooded. All farming lands are irrigated by a system that is a thousand years old. Some of the ditches are walled up with bamboo wicker work and some with tiles and stone. Nearly half the total population of Japan is engaged in agriculture. Silk and tea, the two chief exports of the country, are raised almost by the work of women.—London Times.

ITS LESSON.

From the hard times people will reap lessons of experience, learning how to act with more care in business and how to apply remedies for the stringency of such times. With more care we will have less accidents, and much less suffering if we know the true remedy. In the field and work-shop, indeed in all activities, sprains and bruises happen and bring the hard times of pain and suffering. Experience teaches that it is always best to get the best remedy, which is the cheapest in the end. Experience points to St. Jacobs Oil as without question the best remedy for such mishaps, being the surest and prompt-est cure. Suffering brings hard times even in prosperity. The best remedy for it is the surest way out of them.

Seventy-two races inhabit the earth and use 3,004 different tongues. There are about 1,000 religions.

A telephone exchange has been established in Kioto, Japan, and is said to have proved a great success. It is under government control.

He Walked Behind.

A Japanese diplomat once said to an American, "When I marry I take a head servant; when you marry you become one." A man who recently visited Japan quotes a remark in a somewhat similar vein made by a Japanese interpreter. "I sat one day," he said, "at the door of a dining-room in a hotel in Tokio where all kinds of foreigners were staying, and I watched them as they came in. The Frenchman came in with madame on his arm. Then the Englishman came in so imitating a pompous, self-important personage). And his wife? Oh, she came after him like this (dramatizing a meek and timid woman following). And the American husband? The American husband? Oh, he's not in it. Madam sails in ahead of him, and he just walks behind wherever she goes."

Railroad Speed in Germany.

Germany has made some bold experiments at railroad speed on the line between Berlin and Gorlitz. The best performance was sixty-five and three-fourths miles, which was twelve miles better than the highest speed of the fastest German train, the Berlin-Hamburg lightning express, which does 177½ miles in three and one-half hours. Ordinarily German express trains make forty-eight and one-half miles an hour.