

The Handy Mechanic.

SOME GOOD GATE LATCHES.

The form of the gate latch or fastening is an important portion of a fence and care should be exercised in making. The form shown in Fig 1 is very simple and effective.

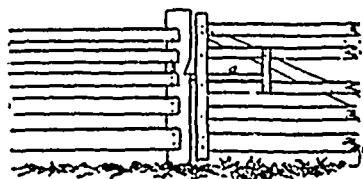


FIG 1. SIMPLE AND EFFECTIVE GATE LATCH.

The latch, *a*, is of hard, tough wood, 18 in in length, $\frac{3}{4}$ in thick, and $1\frac{1}{2}$ in wide. Through the inner end, a wooden pin holds it in position.

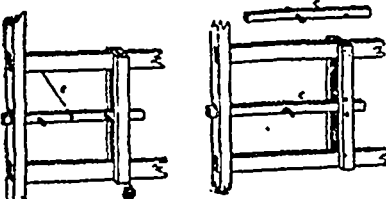


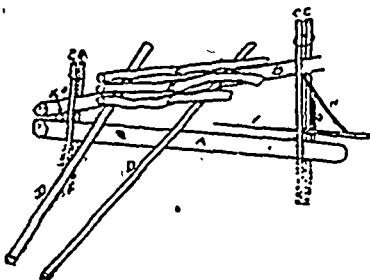
FIG 2

FIG 3.

When the gate is closed the outer projecting end rests in a notch cut in the post, as at *s*. All the plans shown admit of the gate opening either way if desired. In Fig 2, a swinging latch is used, which should be about the size of that in Fig 1. It is suspended by a wire at *c*. Two wooden pins prevent it from being moved too far in either direction. The plan in Fig 3 is quite similar to the others, and is clearly shown. The latch, *c*, is shown in an enlarged form. A notch is cut in the lower side, which rests on a pin when the gate is closed, the weight of the latch keeping it in position. Next in importance to the hinges of a gate are the fastenings, which should invariably be made of the very best material.

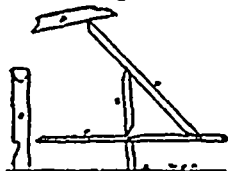
A SECURE ANIMAL TRAP.

Lay the bed piece *A* firmly on the ground. Then place the four stakes, *c c c c*, that must be pointed to drive into the ground to keep the fall piece



A RUSSIAN WOLF TRAP.

marked *B*, in position. Lay *B* on *A* with a piece of timber 2 or 3 inches in diameter between, as at *x*. Secure the tops of the stakes with rope or wire. Then lay on the two bearers, *D D*, to hold the loading *E E E*. The trigger is simple and easy to make. *I G H* is the trigger in three pieces. Determine the intended height of the trap between *A* and *B* at the position of the trigger-post *G*, and let the post be three-quarters the height. Let *H* be the strongest piece, as it has to bear the weight of all the loading. The piece *F* is the slightest, with the stoutest end to the right hand of the trap. In preparing the trigger, make the pieces in proportion and it will be evident that the slightest pressure on *F* is sufficient to disengage it at the catch *I* when the *B*, with its loading, collapses on to the intruder.



TRIGGER.

In placing the trap in position, it should be arranged so that the part *F* on the trigger comes in the center of the track, or hole, in any fence; and the load bearers, *D D*, should be so arranged as not to come in contact with any obstruction when *F* falls on the

vermin, or they may make their escape. The loading can be made as heavy as circumstances seem to require.

KEEP WATER OFF THE ROADS.

Water is the greatest enemy to road making and if it can be excluded or got rid of, most materials, even clay, will make a good road. Gravel, or clay and gravel combined, make an excellent road when free from water, but when mixed with water it is a failure. In the rainy season in autumn, if the road bed is flat, or if there are ruts or depressions holding the water, or if there are pools of water in the ditches, or by the roadside, it permeates the ground, till the road bed to a considerable depth is perfectly saturated or filled with water, making a soft, muddy road till freezing time, when there is a rough, frozen surface for a time. But the greatest trouble is in the spring time when we say the "frost is coming out of the ground." This water, when frozen, is expanded in every direction, separating every atom of dirt or sand from every other atom, and when the ice is melted, there remains this loose condition of the ground or road material, with only water between and separating the particles of earth, giving conditions that make the road unfit for use; and so we see it is the water that makes the mischief, and of whatever material the road is built the water must be excluded or the work is a failure; hence good drainage should be the first consideration. And so this section of road that has been selected for improvement should be well studied, and when it is determined what to do in view of permanence and durability, why not proceed as is done in other work of like importance, and employ experts in their line of work, or let the job by contract?—[Road Commissioner Wells, Vt.]

The Farm Water Supply—Actual chemical and bacterial examinations by Prof. Shutt of the Ont. exp. farm, of a large number of samples from farm water supplies all over the Dominion, show a great many well waters to be badly contaminated with barnyard drainage. This is a great wrong, one which no farmer can afford to let pass uncorrected. It is just as necessary to have pure water as good food. The well should never be in the barnyard, either for the house supply or for stock; it there becomes a cesspool. Water may be reeking with the products of animal digestion and yet be clear and sparkling. Prof. Shutt believes much of the headache and nausea so prevalent throughout rural districts are in part caused by impure water.

To Keep the Tire on a Wheel—Some farmers can set their own tires on wagon wheels, which is a great convenience when they are far from a blacksmith; but they cannot always succeed in setting them so they will remain tight for any length of time. Have the wheels perfectly dry, as the oil which is to be applied will not soak into wet wood. Procure an oil heater such as is used for this purpose, a long narrow iron vessel in which linseed oil is placed and heated. Bring it to the boiling point, keeping it there, for if it gets much hotter it will burn the felloe so it will not be durable. Put a stick through the wheel so that it can be kept turning in the hot oil for an hour; by that time it will be well saturated and the tire can be put in place and will remain tight for years unless the wheel itself wears out. The pores of the wood being filled with oil makes the wood impervious to water, and it is then much more durable. It cannot shrink in a dry season or swell in a wet one.—[M. M. W.]

Krauser's Liquid Extract of smoke is no longer a novelty, and its use has spread rapidly to all parts of the country in the last few years. It is made from the finest selected hickory and contains the same ingredients of the wood that preserves the meat when it is smoked in the old way. Liquid extract of smoke is made by E. Krauser & Bro., of Milton, Pa., who will send full information to anyone interested. It improves the flavor of the meat, is perfectly healthful and is a better protection against insects than the smoke of the smokehouse.

OVERWORK WEAKENS YOUR KIDNEYS.

Unhealthy Kidneys Make Impure Blood.

YOUR KIDNEYS ARE YOUR BLOOD FILTERS.



The Prompt Way to Cure Yourself When Symptoms Show That Your Kidneys Are Out of Order.

To Test for Yourself the Wonderful Curative Properties of the Great Modern Discovery, Swamp-Root, Every Reader of "Farm and Home" May Have a Sample Bottle Sent Free by Mail.

The way to be well is to pay attention to your kidneys.

They are the most important organs of the body—the blood filters.

All the blood in your body passes through your kidneys once every three minutes.

The kidneys strain or filter out the impurities in the blood—that is their work.

Purifying your blood is not a question of taking a laxative or physic.

Does your blood run through your bowels?

What the bowel-cleaner does is to throw out the poisons confined in your bowels ready for absorption into your blood, but the poisons which are already in your blood, causing your present sickness, it leaves there.

There is no other way of purifying your blood except by means of your kidneys.

That is why bowel-cleaners fail to do their work—they forget the kidneys.

When you are sick, then, no matter what you think the name of your disease is, the first thing you should do is to afford aid to your kidneys by using Dr. Kilmer's Swamp-Root, the great kidney remedy.

In taking Swamp-Root you afford natural help to nature, for Swamp-Root is the most perfect healer and gentle aid to the kidneys that is known to medical science.

Dr. Kilmer, the eminent physician and specialist, has attained a far-famed reputation through the discovery and marvelous success of Swamp-Root in purifying the blood, and thereby curing chronic and dangerous diseases, caused by sick kidneys, of which some of the symptoms are given below.

Pain or dull ache in the back or head, rheumatism, neuralgia, nervousness, dizziness, irregular heart, sleeplessness, sallow complexion, dropsy, irritability, loss of ambition, obliged to pass water often during the day, and to get up many times at night, and all forms of kidney, bladder and uric acid troubles.

Swamp-Root is sold by all dealers, in fifty-cent or one-dollar bottles.

To prove the wonderful merits of his great discovery he now offers to every reader of this paper a prepaid free sample bottle of Swamp-Root, which he will send to any address, free by mail.

A book about Health, Diet and Disease as Related to Your Kidneys, also sent free with the sample bottle. This book contains some of the thousands upon thousands of testimonial letters received from sufferers cured.

The great discovery, Swamp-Root, is so remarkably successful that our readers are advised to write for a sample bottle, and to kindly mention Farm and Home when sending their addresses to Dr. Kilmer & Co., Binghamton, N. Y.