

REDUCING MOUSE AND RAT DAMAGE

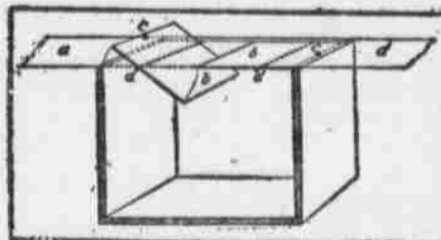
Odor From Dead Animals Makes Use of Poison Impracticable in Houses.

PLAN TO PREVENT ACCIDENTS

Barium Carbonate, Strychnine, Arsenic, and Phosphorus Are Recommended — Carefully Label All Packages.

(From the United States Department of Agriculture.)

While the use of poison is the best and quickest way to get rid of rats and mice, the odor from the dead ani-



Pit Trap—aa, Rat Run; bb, Cover; cc, Position of Weights; dd, Rats on Which Covers Run.

mal makes the method impracticable in occupied houses. Poisons may be effectively used in barns, stables, sheds, cribs and other outbuildings.

Caution.—In the United States there are few laws which prohibit the laying of poisons on lands owned or controlled by the poisoner. Hence it is all the more necessary to exercise extreme caution to prevent accidents. In several states notice of intention to lay poison must be given to persons living in the neighborhood. Poison for rats should never be placed in open or unsheltered places. This applies particularly to strychnine or arsenic on meat. Packages containing poisons should always bear a warning label and should not be kept where children might reach them.

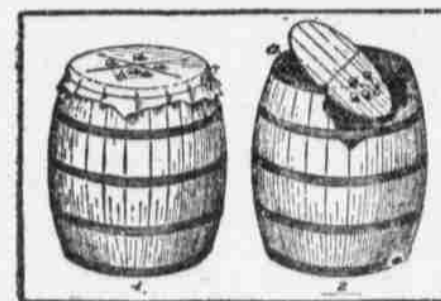
Barium carbonate.—One of the cheapest and most effective poisons for rats and mice is barium carbonate. This mineral has the advantage of being without taste or smell. It has a corrosive action on the mucous lining of the stomach and is dangerous to larger animals if taken in sufficient quantity.

Barium carbonate may be fed in the form of dough composed of four parts of meal or flour and one part of the mineral. A more convenient bait is ordinary oatmeal with about one-eighth of its bulk of the mineral, mixed with water into a stiff dough. A third plan is to spread the barium carbonate upon fish, toasted bread (moistened), or ordinary bread and butter.

Strychnine.—Strychnine is too rapid in action to make its use for rats desirable in houses, but elsewhere it may be employed effectively. Strychnine sulphate is the best form to use. The dry crystals may be inserted in small pieces of raw meat, vienna sausage or toasted cheese, and these placed in rat runs or burrows; or oatmeal may be moistened with a strychnine slrup and small quantities laid in the same way.

Strychnine slrup is prepared as follows: Dissolve a half ounce of strychnine sulphate in a pint of boiling water; add a pint of thick sugar slrup and stir thoroughly.

Arsenic.—Arsenic is probably the most popular of the rat poisons, owing to its cheapness, yet our experiments prove that, measured by the results obtained, arsenic is dearer than strychnine. Besides, arsenic is extremely



Barrel Trap—1, With Stiff Paper Cover; 2, With Hinged Cover—a, Stop; b, Baits.

variable in its effect upon rats, and if the animals survive a first dose it is very difficult to induce them to take another.

Powdered white arsenic (arsenous acid) may be fed to rats in almost any of the baits mentioned under barium carbonate and strychnine. It has been used successfully when rubbed into fresh fish or spread on buttered toast. Another method is to mix 12 parts by weight of corameal and one part of arsenic with whites of eggs into a stiff dough.

Phosphorus.—For poisoning rats and mice, phosphorus is used almost as commonly as arsenic, and undoubtedly it is effective when given in an attractive bait. The phosphorus paste of the drug stores is usually dissolved yellow phosphorus, mixed with glucose or other substances. The proportion of phosphorus varies from one-fourth of one per cent to four per cent. The first amount is too small to be always effective, and the last is dangerously inflammable. When homemade preparations of phosphorus are used there is much danger of burning the person or of setting fire to crops or buildings

RIDDING RANGE OF PREDATORY ROGUES

Professional Hunters Aid in Saving Sheep and Cattle.

Stockmen Encouraged to Increase Live Stock Production on Federal Forest Preserves—Work of Biological Survey.

(Prepared by the United States Department of Agriculture.)

Skilled hunters in the employ of Uncle Sam are waging persistent war fare against the predatory animal that prey on sheep and cattle in the western states. Their efforts are encouraging stockmen to increase live-stock production on the federal forest preserves as well as in the range country, and they are protecting the sources of war supplies of meat leather and wool now in the western grazing districts.

Hunters of the biological survey of the United States department of agriculture have killed 70,713 predatory animals during the last three years which has resulted in a direct saving estimated at nearly \$5,500,000 a year to the stockmen of the Rocky Mountain section. The total kill since the fall of 1915, when the work was started, includes 60,473 coyotes, 8,094 bobcats, 1,829 wolves, 201 mountain lions and 137 bears. The government experts estimate that the annual depredations among cattle and sheep effected by single predatory animals are as follows: Wolf, \$1,000; stock-killing grizzly bear, \$500; mountain lion \$500; bobcat, \$50, and coyote, \$50.

Stockmen in sections where the predatory animals are obnoxious are aided by the government in ridding the ranges of such rogues. In some localities the stockmen's associates co-op-



Since 1915 Biological Hunters Have Killed 1,829 Wolves.

erate with the state and federal authorities in the extermination campaign, professional hunters being employed to detect and kill the prowling animals that prey on sheep and cattle. Illustrative of the scope of this work the total income from pelts of predatory animals killed by government hunters last year amounted to approximately \$100,000. In addition many other animals whose skins could not be reclaimed were killed by poisoning. Ordinarily the United States biological survey has from 250 to 350 professional hunters permanently in its employ. The area wherein predatory animal control is practiced includes ten districts: Montana, Idaho, Washington and Oregon, Nevada and California, Utah, Wyoming and South Dakota, Colorado, Arizona, New Mexico, and Texas.

During the last twelve months 20, 226 coyotes, 3,458 bobcats, 849 wolves, 85 mountain lions and 41 stock-killing bears have been disposed of at an annual saving of approximately \$2,400,000 in domestic stock.

Recently a government hunter shot two male wolves which had killed 150 sheep and seven colts on two Wyoming ranches, while another trapper bagged a pair of old wolves which had a record of killing \$4,000 worth of live stock a year. A third trapper destroyed 85 coyotes and two bobcats in one month, using six horses and 200 traps over a trap line varying from 50 to 100 miles in length. A coyote was recently captured which had destroyed \$75 worth of sheep in one week. Two wolves, seven mountain lions and a huge grizzly bear, the largest of its species killed in the Yellowstone park section, are the kill of another of Uncle Sam's sharpshooters. These results are typical of the campaign destined to free the Rocky mountain range country of predatory animals.

MACHINERY JUNKED TOO SOON

Many Farm Implements Are Discarded Before They Have Entirely Lost Their Usefulness.

If the junk man never got any farm machinery until it was really useless to the farmer, he would not stay in the junk business long. A lot of farm machinery is junked when it would be very useful in the hands of a man who is expert enough to put it into running order. Take good care of your machinery, use it as long as it gives good service, have it repaired if possible, and when you are sure it is beyond use, junk it.

Fruit for Exhibiting.

When exhibiting fruits or vegetables at the fairs pick uniform, evenly colored specimens of good marketable size. Large or grotesque specimens have no exhibition value.

NEWS and GOSSIP OF WASHINGTON



Woman Not Only "Critter" Sensitive About Age

WASHINGTON.—It is a man doctrine that woman is oversensitive about her age. And doubtless woman is, but her brother Adam is that same— with this instance for a showdown: A young fellow seated in a crowded car offered his place to an oldish man who was hanging to a strap. The oldish man declined the courtesy with a loud rudeness that caught the attention of all around.

"Keep your seat, sir. I am not as old as you seem to think. You are offensive, sir!"

The young man flushed the red of embarrassment, sat down and turned his face to the window. The passengers across shoved closer and made room for the oldish passenger. As soon as he was settled he took the whole car into his confidence.

"Some people are too officious. I may be a little older in years, but anybody can see that I am as vigorous as the next—and just as able to stand as he is."

The passengers kept neutrally noncommittal and the young man made no motion that he heard. Feeling the lack of proper sympathy, the oldish man took a paper from his pocket and began to read. Then—perhaps in a sudden gust of realization that he had been ill natured—he leaned across and tapped the young man on a knee.

"Say, sir, here's my paper, if you'd like to read it."

The young man thanked him and declined.

"But I want you to take it, sir. There's a first-rate account of the evacuation of—"

The young man refused. The oldish man insisted. Then the young man evaded up.

"I accept your apology because you must feel pretty cheap before all these people for insulting a man for offering you a kindness—but your paper can go to blank."

And that oldish man will doubtless tell you to the end of his days that woman is oversensitive about her age.

Which is one of the ways of Adam.



SOME PEOPLE ARE OFFENSIVE — I'M NOT AS OLD AS YOU THINK — I CAN STAND —

Finally Learned the Greatest of All Lessons

JUST to show that Father Time can attend to his own affairs: In one big perpetual motion place in this town there was an irresponsibly joyous office boy who simply wouldn't grow up. He wouldn't study, and he wouldn't shed his knee pants and he hated girls.

When he wasn't running copy he staid in the nearest swivel chair with any old thriller he could find around. For varley his fancy expressed itself prodigally in forages into paper bags of lunches that bore the trade-mark of mother and home. And he absolutely scorned clean fingernails. They were "sissy."

The men to whom he was apporioned were addicted to fatherly warnings as to what happens to office boys who don't study to become editors—but the boy scorned editors. His ambition—his one great ambition—had been to climb a ladder and chalk off baseball scores, until the electric boards came along, and after that he settled on a future of sightseeing cars so that he could talk through a megaphone. But, alas for well-laid plans! One day a messenger higher up dropped out and the boy stepped into duties that allowed less time for thrillers and eats—but, at that, he didn't study, his prime idea being that a fellow could learn things outside of books—which, incidentally, some mighty wise men have said before him.

Each admonitory pill was swallowed with gay unconcern, until one day the boy failed to show up. Another boy filed in, and that was all there was to it until, not so long ago, they came across his name in print—in the roll of honor, along with those of others who fell on that day which history has already christened "the glorious 18th of July."

Father Time, by some inscrutable alchemy, had changed the boy into a man and taught him the greatest of all lessons from the Greatest of all Books: "Greater love hath no man than this, that he lay down his life for a friend."

Yes, There Are Things Every Fellow Should Know

THEY must have been in the self-made class, with the job imperfectly done, or the one with the rakish hat—green felt—would never have asked the one with the twirly cane: "Say, old man, which is right—inducted into the army or inducted out of it?"

"I'm afraid I fell down on that word this afternoon. I was talkin' to a little queen about her brother who has just left for Camp Meade and she looked at me so funnylike that I hanged if I don't believe I used the misfit lingu. Which oughter I had said—inducted in or inducted out, huh?"

And the one with the twirly cane would never have responded as he did unless he had been self-made, with the job imperfectly done:

"I should say that—er—well, the truth is, it's skipped my memory at just this instant—though I know there isn't any what you might call a regular difference of any account—not so's a woman would notice it, anyhow."

Education is a great big help. But it isn't everything. A man may go through life without even a bowing acquaintance with the triumvirate of the R's and still make a happy home and go to heaven when he dies, still—

It is a great boon to be able to know without danger of offending the little queens whether a fellow ought to say inducted out of the army or inducted in.

Small Boy Appallingly Direct in His Criticism

MAN'S study of man lacks the directness of childhood in its search of God. Take, for one illustration, a small boy—name unknown—who was sitting on the curb investigating a captive worm.

He was such a dead-in-earliest kiddie that he had to hold up a young man who was brisiking by: "Mister, do you know the name of this worm?"

Mister considered the fuzzy, mahogany wriggle unofficially known as a fever worm. Then he voiced knowledge, which failed to convince.

"No, it ain't. Fever worms come in the spring. This one wears the same kinder overcoat, but it's another kinder worm."

"What are you going to do to him, son?"

"Nothin', 'cept to poke at him to see him turner 'round and run the other way. He's got some sense to him, but I don't see what God wanted to make him for. I wouldn't'er wasted time on him, myself."

"What do you think the Lord ought to do about it?"

"Make mens that can fight. Over yonder at the camp, where my father is, they won't bother with no 'count men; they has to be all right to fight. That's what I think God ought to make all the time."

A child in a temple confounding the high priests.

And we, poor old blind-as-bats grown-ups, calling ourselves wise, knowing all the time that we know—

Nothing.



LET ME SEE — F — ER — R — A — WHICH IS RIGHT — INDUCTED INTO THE ARMY OR INDUCTED OUT OF IT —

FOR BETTER ROADS

ROAD-BUILDING ROCK TESTED

Value of Material Gathered in Many States Given by Department of Agriculture.

(Prepared by the United States Department of Agriculture.)

Results of physical tests in 1916 and 1917 of road-building rocks are given in Bulletin 670, recently issued by the United States department of agriculture. This bulletin supersedes the department's Bulletin 537 and supplements Bulletin 370, which gave the results of the more common physical tests of approximately 3,650 road-building rocks examined prior to Janu-



Repairing Road—Cheapest and Best Way is to Attend to Holes and Ruts While They Are Small.

ary 1, 1916. The rock tested came from most of the States. In a number of cases, in addition to other tests, the crushing strength of the rock also is given. The bulletin also contains a complete record of all the crushing strength tests made by the office prior to January 1, 1916.

The average crushing strength on granites and gneisses lies between 20,000 and 21,000 pounds per square inch according to data in the bulletin, and the average crushing strength of limestone and dolomites is between 18,000 and 19,000 pounds per square inch.

Granites, gneisses, schists, sand stones and quartzes should not in general be used in the wearing course of water-bound macadam roads, it is stated, and shales and slate should never be used in this manner. Cement value tests, therefore, have been discontinued on these materials.

MOTORCAR IMPROVES ROADS

Farmer in Secluded Rural District Keeps Highway in Good Condition Without Effort.

A friend who spent the entire summer and some of the fall in a secluded rural district was telling us the other day about how the farmers kept their roads in good shape in the section in which he was sojourning, says a writer in Cleveland Plain Dealer.

"There aren't any state roads in that part of the country," he says, "and no brick or macadam. But the farmers keep the gravel and dirt roads in excellent shape. Whenever my landlord took a trip to town, or anywhere, he used to hitch a road drag to his motorcar. Then the car would pull the drag along the mile or two that he was interested in keeping up. He would unhitch the drag and leave it by the wayside. On the way home he would pick up the drag where he left it and drag the other side of the road going back. And he'd make a round like that almost every time he took the car out."

CULVERT GUARDS ARE URGED

Particularly Serviceable at Night in Preventing Accidents—Railings Painted White.

Because unguarded culverts on country highways are frequently the cause of serious automobile accidents, particularly at night, special pains is now being taken in many parts of the country to place railings at the ends of such structures, together with suitable guards either side of the approaches. An excellent example of such an improvement is found in the substantial concrete guards on a highway in Michigan. The short lengths of fence are of wood and are painted white to match the concrete and to add to their conspicuousness, particularly at night.

Value of Good Roads.

The value of good roads is now recognized everywhere, but few know how easily and how cheaply they may be had.

Need Country Roads.

People in towns need country roads as well as paved streets, for their living comes originally from the land.

Thanks to Motorcar.

Thanks to the pushful, pervasive motorcar, American road building has "got a move on" at last.

After the Grip—What?

Did it leave you weak, low in spirits and vitality? Influenza is a catarrhal disease, and after you recover from the acute stage much of the catarrh is left. This and your weakness invite further attacks.

The Tonic Needed is Peruna.

First, because it will assist in building up your strength, reinvigorating your digestion and quickening all functions. Second, because it aids in overcoming the catarrhal conditions, helping dispel the inflammation, giving the membranes an opportunity to perform their functions.

Thousands have answered the question after grip by the proper use of this great tonic treatment. You may profit by their experience.

Liquid or tablet form—both safe and satisfactory.

THE PERUNA CO. Columbus, Ohio



Her Doctor the Man These Times. He—If I should kiss you, I suppose you'd go and tell your mother. She—No, my lawyer.

KIDNEY TROUBLE OFTEN CAUSES SERIOUS BACKACHE

When your back aches, and your bladder and kidneys seem to be disordered, go to your nearest drug store and get a bottle of Dr. Kilmer's Swamp-Root. It is a physician's prescription for ailments of the kidneys and bladder.

It has stood the test of years and has a reputation for quickly and effectively giving results in thousands of cases.

This preparation so very effective, has been placed on sale everywhere. Get a bottle, medium or large size, at your nearest drugist.

However, if you wish first to test this preparation send ten cents to Dr. Kilmer & Co., Binghamton, N. Y., for a sample bottle. When writing be sure and mention this paper.—Adv.

Wanted His Right.

"What the dickens is the matter with you?" furiously demanded the warder of Pat. "What do you mean by kicking up a row at this time of the night?"

"Sure, an' I only want to go home," said Pat.

"Don't be a fool, man," said the warder coming across to see if his prisoner was quite well.

"Fool, bedad," shouted Pat from the other side of the bars. "I'm in me rights."

"Now, look here," broke in the warder meaningly. "You've got seven days hard; seven days you've got to do, so you'd better do them quietly."

"You're quite right," smiled Pat. "Shure, the ould boy gave seven days, but, begorra, he said nothing about nights, and faith you can surely trust me to come back in the morning."

After the Offense.

"It was a portly but very polite person who sat next to Jones in a railway station.

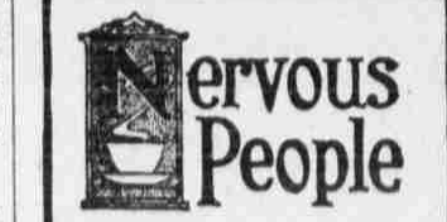
"Pardon me," said he to Jones, "but what would you say if I sat on your hat?"

"Suppose you sit on it and then ask me," sarcastically suggested Jones.

"I did," said the portly person, imperturbably.—Judge.

It's the frequent failures that sweeten the occasional success.

Sadness and gladness succeed each other.



Nervous People who drink coffee find substantial relief when they change to

POSTUM

This pure, wholesome table drink does not contain "caffeine" or any other harmful, nerve disturbing ingredient.

"There's a Reason"