

DOES IT PAY TO PICK STONE?

BY W. P. KIRKWOOD.

Does it pay to pick stone? Sometimes it does and sometimes it doesn't. If the stones are not too large or too deeply imbedded, clearing up a piece of stony land may be one of the least expensive ways of adding to one's productive acres. But if the stones are large and lie deep in the soil, clearing may prove more costly than buying additional acres.

The equipment you need in going after a field of relatively small stones lying near the surface consists of a crowbar, a pick, a round-pointed, long-handled shovel, chains, horses, a stone-carrier, a stone-boat, a wagon, and a lot of good, wiry human muscle. A little explosive, with caps and fuses, should be used for the large and deeply-grounded specimens.

In this equipment the only implement that needs explanation is the stone-carrier. This can be made of two pieces of one-inch gas-pipe about three and one-half feet long, with a heavy network of strong wire, about 18 inches wide, between. If you have no gas-pipe, two stout wooden sticks will do. A carrier of this sort is very handy; lay it on the ground, roll the stone onto it, and then two men—or four men, if the stone be large—can lift it and dump it on a wagon.

Three or four men make a better crew for stone-picking than two, if there be need of pushing the work rapidly. In any case the larger crew makes the work easier. Two men can loosen the stones and drag out the larger boulders with horses and chains while one hauls, and another can fill up the holes when not needed to help load.

The first thing to do is to loosen the stones. Most of this work can be done with crowbar, pick, and shovel. The tougher cases can be hauled out with chains and horses, after the ground around them has been dug away. Here and there, however, is likely to be found a big fellow which even horses can not budge. When this kind of a specimen is encountered, the only thing to do is to use dynamite or some similar explosive.

Usually the employment of dynamite means putting a charge of about 40 per cent. dynamite under the stone to blow it out of the ground and then mud-capping with 50 or 60 per cent. dynamite to break it up. Better results are obtained with a smaller amount of explosive if the mud-capping and cracking are done after the stone is out of the ground. Work of this kind has to be done with care to avoid flying fragments of rock. While it is easier to break up a stone after

it has been blown out of its soil bed, it is sometimes advisable to do the mud-capping and breaking beforehand—after the earth around the rock has been dug away. There is less danger in this, and the pieces do not scatter so far and are more easily picked up for loading on the wagon.

Mud-capping means the placing of a charge of the explosive on the surface of the rock in a compact heap, covering it with from eight to twelve inches of stiff mud, and then exploding it. For this kind of work 50 or 60 per cent. dynamite is best. If the breaking is to be done before a boulder is lifted out of the ground, by a charge of lower percentage dynamite, say 40 per cent, the soil must be dug away from the stone all around and down to the bottom, to give room for expansion.

Big boulders and the use of explosives add greatly to the cost of stone-clearing. In some experimental work the cost of clearing an area of large stones ran to \$102 an acre. On this area 33 per cent. of the stones had to be taken out with explosives. The remaining 62 per cent. had to be pried out with crowbars or else mud-capped after the ground around them had been dug away.

Contrasted with this was the clearing of another field, containing an average of 524 stones to the acre—against 260 for the field of larger stones. In this field most of the stones could be removed with picks, shovels, and crowbars, and the cost was only \$16 an acre. In other words, the field of smaller stones, though it contained more than twice as many was cleared in less than one-sixth of the expense of the other. In this field only 3.8 per cent. of the stones had to be pulled out of their beds with a team. The stones were not trifling, however. Of the 524 to the acre, 256 could be handled by one man in loading, 118 required the muscles of two men, and 150 needed even more muscular energy than two men could command.

A stone-carrier was used effectively in the clearing work done in this experimental work. The work was further lightened by the use of a plank in unloading stones from the wagon to the rock pile. With this it was possible to roll large boulders from the wagon to the top of the rock pile and thus build a higher and more compact pile than could have been made otherwise.

In counting the cost of these clearing operations every item of expense was included—man-labor, horse-labor, explosives, caps and fuses.

Rats and Mice.

With the coming of cold weather, the cellar becomes an interesting and attractive place. The shelves filled with canned fruit and other delicacies, boxes and barrels of potatoes and other vegetables, a collection of unripe tomatoes, bins and trays of apples, all look mighty good when storms begin raging.

So thought Mr. Rat, for he promptly discovered a secret passage to this storehouse of mine. He evidently thought he was established for the winter, as he went about feeding systematically. Beginning on a large Irish Cobbler, he ate a part of it each night. On a shelf I had arranged, for my own use, some choice apples of several varieties. Taking a fancy to an especially fine specimen of a King of Tompkins' County, he ate a portion of that also each night. Not succeeding in shutting him out by closing what was supposed to be his entrance, I secured a trap. Tying onto the pan a bit of bacon, I waited for the morning. The bait was gone, but the trap had not been sprung. After a number of days—during which I saw Mr. Rat several times—by carefully oiling the parts of the trap, I succeeded in making it so sensitive that one morning I found my quarry dead, caught by the end of the nose. There have been no signs of rats about since.

Mice have been quite plentiful about the house—driven in by the cold from the garden and grass, where they have been feasting on corn and other delicacies. Taking a barrel of waste papers from the woodshed to burn in the garden, I found in it, and killed, a dozen half-grown mice. For several days I have been trapping in the woodshed and in an upstairs store-room. The battle is almost over, and I am looking forward to a peaceful winter.

A good autumn slogan for the villager and the farmer is, "Death to rats and mice." Keeping this in mind, and acting on it vigorously, much good food will be saved for poultry, pigs, and people; and many buildings, and much other valuable property, will be saved from serious injury.

Corn and Sunflowers on Different Soils.

Average yields of corn and sunflowers for four years at the Central Experimental Farm at Ottawa, on sandy loam, have led to the Dominion Field Husbandman expressing the opinion in his report for 1924 that there is no object in changing from corn to sunflowers on land where the former yields satisfactorily. Corn is, moreover, he adds, an easier crop to handle than sunflowers and produces a slightly better quality of silage. On sandy loam the average yield in the quartette of years of corn silage was 24.1 tons and of sunflowers 21.68

Substitutes for Green Feed in Poultry Feeding.

During the winter months, when it is sometimes difficult to get suitable green feed for poultry, certain substitutes may be used. In order to test the relative values of clover leaves, sweet clover meal, alfalfa meal and tomato pulp for this purpose an experiment was conducted in 1923-24 by the Dominion Poultry Husbandman, at the Ottawa Experimental Farm. One pen was given clover leaves fed in the litter once a day, another was given clover meal mixed in the wet mash fed at noon, a third pen received alfalfa meal in the same way, and to the fourth pen tomato pulp mixed in the wet mash was fed. All the hens were fed a standard scratch grain and standard mash, beef scrap was kept continually before them and they had both milk and water to drink.

The clover meal gave by far the best results for production, cost of producing eggs and profits. Tomato pulp came second, alfalfa meal third and clover leaves last. The hatchability of the eggs from the birds fed tomato pulp was, however, exceptionally poor.

Rats and Fruit.

With even the most diligent care, the storage house will sometimes become infested with rats or mice.

Apparently once they get started on an apple or pear diet they become confirmed enthusiasts, and any other

food must be tempting to induce them to touch it.

The most hopeful plan of attack is to start a many-sided campaign, putting out simultaneously two or three sorts of traps and several kinds of poisons, each kind conveyed on two or three different baits. This is far more effective than putting out one poison one night and another the next, and a trap the third, for the enemy seems to soon learn that we are after him and is more wary than ever.

Guard the Register.

In homes where there is a pipeless heater or any kind of heater which requires a register in the floor, articles of value are sometimes dropped through the grating. Mrs. Brown, who had such a register, had her husband fasten a piece of wire netting over the register. This can be "sewed" on by running fine wire through it and the grating and pulling it down snugly, or, if the exposed wire is unsightly or there is danger of marring the floor, the top of the register may be removed and the netting fitted to the underside.

Irish.

The foreman looked him up and down. "Are you a mechanic?" he asked. "No, sorr," was the answer. "O'im a McCarthy."

Weak and delicate stock are the first victims of contagious diseases.

THE TWO BALLOONS

This is the story of two air balloons, one red, and the other yellow. They were given to Dick and Edie at a children's party that they went to one summer afternoon. There was all sorts of fun at the party—Punch and Judy, races, and donkey rides—but more than all these they loved the two big air balloons that were given to them by their little hostess as they were leaving.

Dick and Edie played with their balloons till bedtime, and before they went in from the garden they tied them to the post of the verandah. It was such a lovely night they thought they would be quite safe.

After the children had gone in a wind began to rise which blew the two balloons backward and forward.

"What a grand night for a fly!" said the yellow one. "One could fly up to the moon in no time."

"But the children would be so sorry to find us gone in the morning," said the red one, who was very kind-hearted.

"Never mind the children," answered the yellow one. "I want to see the world."

Then a gust of wind came, and the two balloons were torn loose and began to mount up and up, higher and higher, till they looked like little specks. It was getting dark, and lights were beginning to twinkle from the houses. Floating past a window, the two balloons saw a little boy getting ready for bed. He had with him a large wooden horse with a broken head and no tail, and he was taking it into his little bed to cuddle for company.

"What a silly little boy," said the yellow balloon, "to take such a hard toy as that to bed."

"He looks like a dear little boy," said the red balloon softly, "and I think the horse is his oldest and dearest toy."

On they floated, and passed the windows of a large girls' school. The dormitory windows were all lit up, and they could see the little girls in their white nightdresses, and pigtailed down their backs, jumping over the beds, and chasing one another round the room. The door opened and a lady came in; all the little girls popped quickly into bed, and covered themselves up. There was just one tiny girl who had not time to pop into bed, and she began to cry.

"Silly little thing," said the yellow balloon; "there is nothing to cry for!" "She is so tiny," said the red one; "and look, the lady has taken her on her lap and is kissing her, so she will be comforted. I am so glad."

Now they left the houses and were out in the open country. They sailed over fields and treetops, and once right

across a wide river. It was beautiful, for they rose so high the red one thought that at last they must surely reach the stars. Once the yellow one got caught on the bough of a tree, by the string which still floated behind him, and he was held there for quite a long time.

"You must wait for me," he cried to the red one. "You can't go without me. You would never find your way to the moon without me to show you the way."

Another gust of wind set him free and they flew on together. It grew lighter; the houses and gardens became visible. The rising sun shone on a gilded weathercock that was on the church steeple, making it look like gold.

"Look!" cried the yellow one, "I shall fly and visit that beautiful golden bird. I am sure he will be pleased to see me, because we are of the same color, and it shows we are of royal blood."

"I shall not come," said the red one. "I can see a dear little girl sitting in a garden below. I shall go and visit her. I like children better than golden birds, so good-bye!" And he started for the earth. He found it easy to go down because the gas was slowly escaping from him, through the opening where he had been tied.

"Good-bye!" cried the yellow one. "You are very foolish and will never rise in life." But the red one did not hear—he was already out of sight.

Now the proud yellow balloon floated on till he was close to the church steeple and the golden bird.

"Good morning!" cried he to the weathercock, but there was no answer. It only veered first one way and then another with every gust of wind.

"Good morning!" again cried the balloon, but no answer. Then the yellow balloon got as close as he could to the weathercock, and was just about to shout "Good morning!" in a very angry voice, for he thought the golden bird very proud and rude, when it veered quickly round and the end of its very sharp and pointed tail pierced the side of the balloon. There was a loud report, like a pistol shot, the poor balloon got smaller and smaller till he was only a piece of shriveled tissue, and then dropped rapidly to earth.

The red balloon had fallen slowly and gently till he was just over the garden where the little girl sat. She saw it coming, and held her hands out to reach it. Then she took it indoors to show her father. He tightened up the string on it, and so stopped any more gas escaping, and all the summer it was the little girl's companion, and helped to make her happy—and so the red balloon was happy too.

THE POWER OF PICTURES

The Mind May Be Like the Pictures the Eyes Enjoy.

BY JOHN W. HOLLAND.

I wish that every reader of this page might read this story. It made me do some hard thinking about real things.

The mother of a bright college girl recently went to see her daughter and spend a few days on the campus. The girl took especial delight in taking her mother to see the sights and hear the sounds of college life. Of course she wanted her mother to meet some of her newly-made college friends, so the two of them went calling on these friends in their rooms.

In the room of one of her daughter's friends the mother sat and looked about but said little. As they came away she said, "I hope you do not, under any conditions, make a confidant of Helen. She is bright and has attractions, I will admit but . . ."

"Why, mother," exclaimed her surprised daughter. "She is a peach of a girl! One of the most popular girls in the whole college."

"Well, I was thinking of the pictures she has in her room. Everything is suggestive of nudity and some of the prints she has are positively vulgar. I am wondering if her thoughts are not a good deal like her pictures?"

"I never thought of that," admitted the daughter, who knew she had every reason to trust her mother's judgment.

They went to the room of another girl. Here, as before, the mother keenly took in the general tone of the room. On the wall of this girl's room hung a picture of Sir Galahad, and another of Watt's "Hope." There also were various high minded mottoes and beautifully lettered sentiments on the walls.

As they left the Hall the mother said, "I like Ethel! I am glad you and she are such good friends! I am sure that your father and I would be glad if she could come and spend a vacation week with you."

"Well, Mother! And what gave you such a case on Ethel? She is not so widely popular in College and is a perfect 'grind' at her books."

Said the mother, "I noticed the pictures which she had in her room. I imagine Ethel's mind is very like her choice of pictures and sentiments."

The daughter said nothing but long afterward she learned that her mother was right. These two girl friends

had thoughts like the pictures they had chosen and at which they LOOKED.

Not long ago a certain school boy began to slide down in his grades. Finally he was "flunked" and left the school. A teacher who loved the lad, hunted him up and visited him in his room. One look around the room revealed the reason of the scholastic failure of the youth. The walls of the room were literally papered with pictures of vulgar suggestions. Without a doubt the pictures got between the lad and his school books so that his brain cells did not care to "bother with" grammar and mathematics.

WHY HE FAILED.

Students of psychology tell us that we remember a greater amount of what we see than of what we hear. The percentage is something like three times as much. If that is true then we are just about what we SEE. There is a record of a very old prayer that ran like this: "Turn away mine eyes from beholding vanity (what-ever may draw one away from that which is best)."

PICTURES THAT UPLIFT.

Ulysses said, "I am a part of all that I have met." Too much care can not be taken by parents to see that what their children meet through the eye be of such character as will pull their minds to high and noble things.

We are animals without trying but we are moral beings only through conscious effort.

Every eye that read this page will see in memory some picture that hung on the walls of the old home—perhaps a picture of a beautiful landscape, a scene portraying love and true affection, a country road winding past a home or a church. There it hangs before you, forever in your mind, forever a part of your life.

Happy are the young people whose parents have the insight to hang the walls of their early homes with noble pictures.

Pictures were once the possession of the rich few. Now the humblest farm home can have prints of the masterpieces for a few pennies. Alice Cary said:

"Of all the many pictures that hang on memory's wall,
The one of Home and Mother is the noblest one of all."



THE GRACEFUL SIDE FLARE.

Double side draperies are here charmingly adapted to the matron, and give lines of flowing trimness. This type of frock is chic, distinctive and sanderizing, and will grace many

an afternoon and evening function. It may be made sleeveless or with short sleeves and is fashioned of figured velvet, having two semi-circular side draperies of plain georgette, through which the design of the material is plainly discerned. The draperies are placed one above the other, and are stitched to the frock across the top and down the sides about three or four inches from the edge, leaving the ends to fall in graceful cascades. The V neck and long unbroken line at centre front and back are particularly becoming to the figure of large proportions. No. 1233 is in sizes 36, 38, 40, 42, 44 and 46 inches bust. Size 40 bust requires 3 3/4 yards of 36 or 40-inch material for the plain dress, or 5 1/2 yards for the dress with double side draperies. Price 20 cents.

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Glass-Topped Sills.

The window sills in my kitchen have been fitted with pieces of glass, and I can now set pots of plants or flowers on them without marring the delicate gray paint. I also had a piece of glass fitted to the top of my white-enamelled refrigerator, which protects it, and I can set anything on it without harming the surface.

In the autumn I break off choice pieces of ivy from the vines outdoors and put them in water in the house, where they throw out roots and keep fresh all winter. They can then be transplanted in the spring.—Mrs. J. T. M.

Turkey growers of Manitoulin Island, Ontario, are determined to make turkey raising one of the premier industries of the Island and to this end recently formed the Manitoulin Co-operative Turkey Growers' Association, for which incorporation is being applied under the Ontario Companies Act. Assistance in the work was given by representatives of the Dominion Live Stock Branch and the Ontario Department of Agriculture.

Icelandic Diagnosis.

Formerly criminals in Iceland were put in the lunatic asylum. The Icelanders could not understand any one being so foolish as to commit a crime, and being an exceedingly kind-hearted folk thought all criminals must be insane.



Regina, Sask. Dr. C. E. Saunders, discoverer of marquis wheat, and Mrs. Saunders (centre), with (left to right): J. C. Mitchell, thrice winner of the world's best wheat prize; Prof. Manley Champlin; M. P. Tullis, crops commissioner; F. H. Auld, deputy agricultural minister, and J. S. Field, winner of the wheat prize in 1920.