The buildings of a farm constitute no small part of the equipment necessary in carrying on operations, and in many ways they are an index of the prosperity of the owner. If the returns from the annual crops leave to the farmer a surplus over living expenses he usually plans to erect a new barn, or a new house, or to improve those already standing. There is, however, a great diversity in the forms of the buildings required in different parts of the country. In the West the first care of the settler is to put up a house of such style and pattern as his means will allow. It may be only a sod hut, a shack, or it may be a pretentious frame house. After the dwelling is provided he seeks to build a stable for his horses; the barns and silos do not come until a later stage of development is reached, for they mean the investment of a considerable sum of money.

A marked improvement is to be noted in the appearance of modern farm houses, as compared with the older styles. There was a time when size was the only consideration, and the structures stood out square and stiff, with no artistic effect, either in themselves or in the surroundings. The intercourse of city and country has helped to introduce new ideas in this as in other matters, and the farm residence of to-day shows some architectural taste in its design.

Barn building has also undergone a change. When timber was plentiful, the framework of a barn or stable contained an unnecessary number of posts, beams and braces. Rising prices demanded an economy in the use of wood and lighter structures are now the rule, the plank frame being the extreme development of this idea.

In concrete the farmer has found a material that serves many useful purposes. For foundations for walls of bank barns, for stable floors and for minor structures, such as cisterns, watering troughs and even fence posts, concrete is coming to be recognized as the most suitable material.

In the utilization of water for irrigation purposes, and the harnessing of water falls for power many new problems will be presented to the farmer. Though comparatively few are situated in parts of the country where these operations are carried on, yet the prospects are that these agencies will play a part in the agriculture of the future.

THE "SUNSET LIMITED."

Oh, Hush-a-bye Land is a beautiful place
For sleepy small people to go,
And the Rock-a-bye Route is the favorite one
With a certain wee laddie I know.

The track lies on sleepers of feathers and down,
No accidents ever take place;
Though there's only one track, and there's only one train,
But it runs at a wonderful pace.

There are beautiful things to be seen on this route,
If you're good you may take just a peep;
But strange as it seems, they are seen best in dreams;
Be sure that you soon go to sleep.

Say good-night to the Sun, for he's off to bed, too—
He can't hear you, so just wave your hand;
The Moon and the Stars they will light up the cars
As you travel to Hush-a-bye Land.

So, quick, jump aboard, it is time to be off,
You have nothing to pay, you young elf;
Just think of the luxury, laddie, you'll have—
A whole sleeping car to yourself!
—Booklovers' Magazine.

HOW TOM CAUGHT A GHOST.

BELLVILLE was haunted. It had a ghost of its own. Almost every one in the town, from Squire Thompson to Billy White, had seen it, so that it was useless to dispute it. The excitement regarding the ghost was at its height when something more startling than ghosts was at first whispered, and then boldly talked over, and that was robbery.

Those who were not burdened with an abundance of this world's goods were frightened, and those who had plenty were in a panic, and between its ghost and its losses, quiet Bellville was in a state of alarming excitement.

Joe Benton had bid Annie Watson good-night, and gone whistling toward home, when suddenly a tall, white figure "rose out of the ground," he said, and Joe's valor went into his heels, and the way he ran must have astonished the ghost.

Joe was rallied mercilessly, but not long, for the ghost appeared to his tormentors, and their laughter turned to seeing which could run the fastest, they or the ghost.

The boys took to staying at home nights, greatly to the delight of anxious mothers. They were not afraid of a million ghosts, not they, but they didn't feel very well, with a groan, and were going to bed.

Tom Wadleigh was passing his vacation at Bellville and, as he was 16 years old, he laughed scornfully when his 10-year-old cousin told him of the ghost. "Why, Harry," said he, "there isn't any such thing as a ghost. Mother says so, and she knows."

"No, she don't," retorted Harry, "for I heard Dr. Smith tell cousin Carrie it frightened his horse so he ran away and smashed his buggy all to pieces."

"Why didn't he find out what it was?"

"He was going to when it scared his horse."

"I should like to see it," said Tom, boldly, "has it ever been seen here?"

"No, indeed," gasped Harry; "yes, there it is now, right by the window."

"It is the moon shining on the curtain," springing out of bed and going to the window. "How beautifully the moon shines."

His heart almost ceased to beat as he leaned from the window, for right below him walked the ghost. Sparks of fire issued from its mouth, and it loomed up ten feet at least. Some said fifteen or twenty and some that it was taller than the tallest trees, but I suspect that they measured it by their fears. The ghost moved slowly away, and Tom saw a pair of legs. He was a shrewd boy, and he lay awake until morning thinking.

"Squire Thompson was robbed last night," exclaimed Carrie, as he entered the breakfast room next morning.

"Why don't they catch the ghost?" he asked absently.

"The ghost," laughed Carrie. "I should say the thief."

"I should say it would be more to the purpose," said his uncle.

After breakfast Tom wandered down by the river; climbing a tree he was soon lost in thought. Presently hearing a crackling of twigs he looked from his leafy screen and saw a man rapidly approaching. After looking cautiously around, he placed a package in a tree, took a line and hook from his pocket and strolled down to the river.

Tom's curiosity was aroused, and as the man disappeared he slid down from his seat and went to the tree. What was his disappointment in not finding any aperture. Being determined not to give up, he looked more closely, ran his hand over the bark and cut here and there with his knife, and at length, to his great joy, found it. Putting in his hand he drew forth some dried leaves, then a miscellaneous collection of pocketbooks, packages, watches and jewelry. He looked at the articles in amazement.

After deliberating a long time he concluded to carry it all to his uncle's and well satisfied with his success he hustened home.

"O Tom," cried Harry, "mother has just got a telegram from Aunt Eliza. Uncle John is very sick, and she wants her to come right on."

"Tom," said his uncle, as he took him to one side, "I am going with your aunt, and there are five hundred dollars in my chamber that I want you to take care of. Carrie has gone to Dr. Hall's house to stay for a few days, and there will be only Harry and the servant in the house. I drew the money yesterday for Mr. Wilson, and you can give it to him if he gets home. I need not tell you to be very careful."

"I will do the very best I can, uncle," replied Tom; "will you lend me your revolver?"

"Certainly, Tom, if you wish it," replied his uncle smiling; "who knows but you will catch the burglar! Don't shoot the ghost, though," he called, as the carriage drove away.

Tom laid his treasure carefully away, and just at dark strolled over to the village store.

"Uncle left me five hundred dollars to take care of," he said, carelessly.

"You wouldn't have it long to care for, if the burglar heard of it," laughed the storekeeper.

"Isn't there a weapon in the house?" asked Fenton, a stranger in the place.

"Not that I know of," replied Tom, touching the revolver in his pocket, as he spoke.

"You'll have a visit before morning, I dare say."

"Well, I don't suppose ghosts hurt people," replied Tom, quietly.

"I never heerd on't," spoke up a tall man, "if they wasn't touched. I ain't afeerd of any creetur of my weight, but when it comes to ghosts and sich like, I ain't ashamed to own I'm willin' to do without their company."

"So am I," said Fenton, "and though I think I have as much courage as common men, if I should see a ghost I should run like blazes."

Tom's heart beat audibly as he seated himself in the parlor on his return home. He was playing a dangerous game, but he was resolved to win.

As the clock struck twelve he heard a slight noise, and peeping from the

YOU ARE QUITE COMFORTABLE.

window he saw the terror of the village at the door.

Little thinking the window Tom had left unfastened was a trap, the unsuspecting ghost was soon in the silent house.

Sparks of fire issued from its mouth, a stream of blood flowed from its breast, and Tom shuddered as he crept noiselessly up the stairs. The burglar had scarcely entered the chamber when there was a loud report, and a voice said authoritatively as he fell to the floor with a shriek of dismay:

"I have six bullets left, sir ghost. If you make any resistance I shall use them."

"O, you young villain, you said there wasn't a weapon in the house," groaned the man, tearing off his ghostly attire.

"Very true." The only one I knew of was in my own pocket."

"My leg is broken. Help me up."

"You are quite comfortable."

A savage oath broke from the man's lips, and he coaxed and threatened alternately. Finding neither availed, he raised himself and dashed for the door. There was a flash, a quick report, and the man fell down the stairs where he lay senseless.

The housekeeper now made her appearance, and after binding him securely, they watched him until morning.

"You have done it now," said the burglar, on recovering, "I wasn't hurt at all before."

Such a time as there was the next day. Men, women and children gathered about the house. A good deal of laughter was heard when they saw the red paint they had taken for blood.

When the excitement was at its height Tom's uncle appeared.

"Well, you have done bravely," he said, on hearing the story. "I guess that paper has something to do with your fine gentleman."

Tom took the paper. A thousand dollars reward was offered for a notorious burglar. He had left the city and the officers were after him.

The joy of the people was complete when Tom brought out the treasure of the hollow tree. He received many gifts beside the reward.

Bellville has never had a ghost since.
—Waverley Magazine.

So many men say, "I can do it," who can't.

Science and Invention

Commenting on Benjamin Franklin's kite experiment, which proved that lightning and electricity are the same, a scientist says: "It was one of the most brilliant examples of luck yet recorded. To attempt the extraction of lightning flashes from a lowering sky was almost suicidal. Even at this late day timid persons occasionally fly to feather beds, sit on glass-legged chairs, or find refuge in rubber boots during thunderstorms. A repetition of Franklin's experiment cost his immediate imitator his life."

Emil Jung, a professor in the University of Geneva, says that snails perceive the odor of many substances, but only when not far away. In order to prove this it is necessary merely to dip a glass rod in a strongly smelling substance and bring it near the large tentacles of a snail in motion. If it is put close to these horns, the tentacles are violently drawn back. As the animal perceives the odor, it changes its course. Snails also smell by means of their skin. Contact is not necessary, for the mere vicinity of a perfume causes an indentation of the skin.

An Englishman who is a large employer of labor has been investigating the arguments of those who say that a workingman under modern conditions becomes at an early age valueless. He has kept a record of all accidents that have incapacitated his men for three days and upward. The people engaged in his employment are from 15 to 65 years of age, and he asserts that more accidents occur to men under 30 than to those over 50. He says: "I would much rather intrust an exceptionally dangerous job to a man over 50 than to one of 30 years of age."

Amateur entomologists will be interested in a suggestion by Dr. F. E. Lutz for the preservation of all kinds of spiders' webs. The webs should be sprayed from an atomizer with artists' shellac, and then, if they are of the ordinary geometric form, pressed carefully against a glass plate, the supporting strands being at the same time severed. After the shellac has dried, the plates carrying the webs can be stored away in a cabinet. Even dome-shaped webs may be preserved, in their original form by spraying them with shellac and then allowing them to dry before removal from their supports. Many spiders' webs are very beautiful, and all are characteristic of the species to which they belong, so that their permanent preservation is very desirable.

Prof. Silvanus P. Thompson, who recently visited the electric plant in Norway, where soil fertilizers are made direct from the atmosphere, describes the apparatus there used as differing from all others in that the flame of electric sparks is caused to move rapidly through the air instead of having the air blown over it. The result is the production of a much greater quantity of nitric oxid in a given time. The "flame disk," formed between the electrodes, swiftly expands and contracts, being now only half an inch and now six feet in diameter. To make nitrogen burn with oxygen, electric energy must be pumped in, because, whereas in ordinary combustion, such as occurs when carbon combines with oxygen, heat is given out, the formation of nitric oxid is an endothermic reaction; that is to say, heat is absorbed. Prof. Thompson estimates the nitrogen hanging over the city of London alone as considerably greater in quantity than all that is contained in the nitrate beds of Chili.

A Poser.

"There, my son; that will do for this time," sternly interrupted the long suffering parent. "I don't know who was the first man to invent wrestling nor how many mickles make a muckle nor how many is many nor how few is few nor how a sailor smokes his hornpipe nor why Good Friday never comes on a Tuesday nor why rabbits can't add, subtract and divide as well as multiply, nor why an owl should hoot and not howl nor the answer to any one of the many other foolish questions that your abnormally developed bump of inquisitiveness incites you to propound."

"Yes, but, father, I don't want to ask any silly questions. This is a most important one. Please, do you think when a stout man is self-contained he has more room inside of himself to contain himself in than a thin man has or is himself so big that he is just as tightly crowded inside of himself as the thin man is and how much of himself is it that is self-contained and how much is on the outside doing the containing, and——"

"Clarence, go to bed this instant!"

Has Sailed 2,000,000 Miles.

Capt. Alexander Simpson, an English master mariner, recently completed his seventy-first voyage from London to Australia and back, having been in that trade for over forty years. Altogether he has covered 2,000,000 miles without serious mishap.

Unsoiled.

"Don't you think Brown is inclined to dally with the truth?"

"I don't think he ever touches it."—Milwaukee Sentinel.

There are numerous sure-thing confidence games, but matrimony is the surest.

CARL SCHURZ.

Had Gained an Honorable Place Among Our Great Men.

After having lingered between life and death with a complication of diseases for more than a week, Carl Schurz, the famous publicist, editor and statesman, passed away at his home in New York City.

From a poor immigrant, landing in this country when he was 23 years old, Carl Schurz worked his way upward to a position in the foremost ranks of public life. The story of this immigrant boy reads more like a volume of juvenile fiction, with the hero always good and true and struggling for high ideals, than a recital of incidents which make up the career of the great publicist. As statesman, soldier, editor and thinker, Mr. Schurz held the respect of the best element of this country, and many of those who fought side by side with him in the many battles for civic righteousness in which he took a leading part believe it impossible for the country to measure the full value of his services to it.

The life of Schurz was full of adventure and interesting details. He was born at Liblar, near Cologne, Prussia, on March 2, 1829. He was educated at the Gymnasium of Cologne and subsequently at the University of Bonn, which he entered in 1846.

Gottfried Kinkel, poet, philosopher and patriot, who had married Carl Schurz's cousin, was professor of rhetorics in the university. After the revolution of 1848 had broken out Kinkel headed an insurrection, was captured and condemned to imprisonment for twenty years. Schurz was engaged in the defense of Rastadt, a town and fortress in Baden, when it was captured. He hid in a shed for three days and finally escaped through a sewer and made his way to Switzerland and

CARL SCHURZ.

thence to Paris. There, disguised as an organ grinder, he effected the rescue of Kinkel, who accompanied him to England. Schurz supported himself in London for a while, teaching German and writing letters to German newspapers, before he came to the United States in 1852.

When Schurz landed in New York he could neither speak nor write the English language, and the political banners of Pierce and Scott which spanned Broadway were a sore puzzle to him. Yet three years afterward he was admitted to the bar in Jefferson, Wis., and immediately entered the struggle against the aggressions of slavery, for which the Republican party was rapidly organizing. Schurz worked mainly through the Germans of the Northwest, and five years after landing in this country the immigrant boy was nominated for Lieutenant Governor of Wisconsin and came within 200 votes of being elected.

In 1858 Schurz took an active part in the Lincoln-Douglas campaign in Illinois, and it was during this that he formed a friendship with Lincoln which was ended only by the death of the President. In 1859 Schurz went to Boston, where he made an address on True Americanism, which was commented on all over the country. One reading the speech would find it hard to believe that it was written by a man who seven years before could not speak English.

A year after making this address Mr. Schurz was elected chairman of the Republican national convention in Chicago, and supported the nomination of Mr. Seward to the last. After the convention he spoke in various States of the Union, and on the accession of Abraham Lincoln to the presidency Mr. Schurz was appointed minister to Spain. He reached Madrid in July, but after he realized how great a struggle the Civil War was to be he was recalled at his own request. In December he was appointed a brigadier general of volunteers. Mr. Schurz commanded a division of the Eleventh Corps under Howard, fought with Fremont and Sigel, and ended his service under Sherman in North Carolina.

After the war Mr. Schurz was appointed a special commissioner to report on the condition of the seaboard and gulf states, and after that he became a special correspondent of the New York Tribune. In 1866 he became editor of the Detroit Post and a year later he moved to St. Louis, where he purchased an interest in the Westliche Post, of which he took charge. In 1869 Mr. Schurz was elected United States Senator from Missouri.

He found himself very soon forced to oppose the tendencies developed by the strenuous war period in the party to which he had been warmly devoted, and he threw aside the party yoke by opposing the plans of President Grant. The first open difference came with the submission to the Senate of the treaty for the annexation of Santo Domingo, which he fought with all his energy.

In the Liberal Republican movement he took a prominent part and was chairman of the Cincinnati convention which nominated Horace Greeley. He was actively engaged in the Ohio canvass, supporting the election of Hayes as Governor on a hard money platform, and he also took an active part in the presidential campaign which resulted in the election of Hayes. In 1877 he was appointed to a seat in the cabinet.

It was while Secretary of the Interior that Mr. Schurz put into operation the principles and methods of civil service reform, seven years before their adoption by law.

Although Mr. Schurz held no public office after his retirement from the cabinet his influence in public affairs was felt almost to the end of his life. He was a powerful antagonist of machine politics, and because of his strong following his co-operation in all reform movements was welcomed.

Pay day comes slowly to a man who watches the clock.

FOR YOUNG FOLKS

BETTY'S BUSY DAY.

When mother takes the sifter down
To make up Sunday's bread,
Then Betty puts her apron on
And a cap upon her head.
For though she does not go to school,
Nor her music lesson take,
'Tis Betty's very busiest day—
When she must sweep and bake.

She rolls the dough out smoothly
With her long rolling-pin,
And with a thimble then cuts out
The biscuits round and thin!
She puts them in a corner
Of mother's pan to bake,
And helps to stir the batter up
For Sunday's angel-cake.

And when the bread is nicely baked,
Though tired as tired can be,
She sets big dolly's table out,
And asks her in to tea.
Tea over, plates and dishes
She washes every one,
Then tucks big dolly safe in bed,
For Betty's work is done!
—In Youth's Companion.

THE HORSE AND THE OLIVE.

Long, long ago, when there was not many cities in the world, some people across the ocean determined to build a great city in Greece

Now, the powerful sea god, Neptune, and Minerva, the goddess of wisdom, each wished to have the honor of naming the city. Neptune would have it called by his name, and Minerva wished the place called Athens, as one of her names was Athena.

Both Neptune and Minerva made many promises to the people; Neptune promised them wealth, Minerva promised them wisdom.

The king and the people talked the matter over. Both of the promises sounded well, yet, after all, they were only promises, and how could the Greeks be sure that those great beings would not forget to do what they had pledged themselves to do? Perhaps if the city were once named they would both go away and forget to come back again.

At last the king said to the two contestants: "My people wish something more than promises from you. Let us have something now! Show us each some great gift, and the city shall then be named in honor of the one who gives us the most useful present."

Minerva and Neptune were quite ready to agree to this arrangement. Neptune struck the earth and, according to the old stories, a beautiful horse sprang forth, the very first horse that ever appeared upon the earth. "This is my present to you," said Neptune, "see what this noble animal can do for you and for your children—he can draw your carriages and wagons and help you plow your fields!"

The people looked at the horse with much admiration, but Minerva touched the air and there sprang forth from the soil a grand olive tree laden with fruit. "See," said she, "this tree gives food to you and to your children; from it you shall get rich oil that will keep you warm and make a nourishing food; under the branches of this tree you shall find rest and shade; its trunk shall be made into lumber and build you many things. My present is the more useful. Name the city after me!"

The people talked the matter over very carefully. At that time they had no chariots or wagons for the horse to draw; there were only rude plows, and the people did not understand how to make the horse work for them. So they said:

"Neptune has given us a most beautiful animal, but what can we do with it? We are afraid of the horse. We can never make him work—that is absurd! Now, Minerva has given us a present which we can understand, and we know that it will be useful to us every day. So we shall name the city Athens."

Naturally Neptune was much disappointed. "You people are all fools," he said, angrily. "Minerva's tree is well enough in its way, but in the ages to come my horse shall be held in respect and veneration all over the wide world and Minerva's tree shall grow in but few climates and shall be less valued than this gift of mine, which you have scorned today."—Philadelphia Record.

A NUMBER PARTY.

This is the way in which forty young people were entertained one evening not long since:

As many small squares of cardboard had been prepared and numbered as there were to be guests. After the young people were all assembled, the numbered cardboards were distributed, the odd numbers being given to the boys, the even numbers to the girls. They were then divided into five groups, i. e., those numbering from one to eight forming one group, those from eight to sixteen another, etc. They were told that each group must entertain the rest of the company for five minutes in any way they chose; but first they would all be allowed ten minutes to plan what they should do. The forms of amusement which the different groups thought up were odd and highly entertaining.

By this time supper was ready, but as the dining-room held but twenty, a potato race was held to decide who should be the first ones to go to the first table. For this the company was again divided by numbering into two groups—those numbering from one to twenty going to one side of the room, and those from twenty to forty going to the other. Each group was then asked to select a champion from their number. Then potatoes of all sizes were brought in and placed in two piles on the floor at one end of the room; the piles being made as equal as possible in both size and number of potatoes. After drawing their piles by lot, each champion was given a teaspoon with which he was to carry his potatoes across the room and empty them in a basket provided for that purpose. The one who succeeded in getting all his potatoes in the basket first went with his followers to the first table, while the defeated ones waited on them.

An evening like this serves two purposes; the young people, in planning for their entertainment become better acquainted with each other, and everyone is kept busy, a thing which is very necessary to insure a good time to each one present.—The Bee.

A SPINSTER'S TEA PARTY.

A girl of fourteen or fifteen may give her friends of that age a very pleasant afternoon or evening by having a Spinster's Tea Party. The invitations to this unique entertainment should be headed by pen-and-ink drawings of cats, parrots, and cups of steaming tea, and the guests should be asked to come attired as "old maids."

This attire might consist of an old-fashioned dress, with the head bearing side-curls, high combs and spectacles, and the hands covered with mitts, and carrying a reticule or bead bag, in which may be some fennel and peppermint drops to serve as a stealthy refreshment from time to time.

About the room where the guests are received should be large sheets of paper on which have been pasted the heads of cats, cut out of black paper. Some of these cats should be cross-eyed;; some should be winking with one eye; some should have whiskers, but they should all be different from each other.

Tea, cookies and doughnuts should be served on a bare table from old-fashioned china.

The entertainment should consist of a series of questions written on sheets of paper, one sheet for each guest, which must be answered in writing. The following might serve as questions, the answers being given in illustration:

1. A dangerous cat—Catastrophe.
2. An aspiring cat—Catamount.
3. A cat that can swim—Catfish.
4. A cat that can fly—Catbird.
5. A cat that will be a butterfly—Caterpillar.
6. A library cat—Catalogue.
7. A cat that asks questions—Catechism.
8. A cat's near relation—Catkin.
9. A cat that is good to eat—Catsup.
10. A horned cat—Cattle.
11. A cat that throws stones—Catapult.
12. A tree cat—Catalpa.
13. A water cat—Cataract.
14. A cat that flavors grapes—Catawba.
15. A subterranean—Catacomb.
16. A cat that is a gem—Catseye.
17. A cat with a cold—Catarrh.

—New York Press.

CHILDREN'S GAMES.

The game of shul-a-rul is great fun, says the Montgomery Advertiser. You must have the boys and girls stand in a circle and each hold in his hand a sackful of beans or hazelnuts.

Each in turn must take some of the beans or nuts in his hands, turn to his left hand neighbor and repeat the following rhyme:

"Shul-a-rul,
Two hands full;
Pick-a-penny,
Guess how many?"

The neighbor makes a guess. If he guesses too little, the other one must supply enough beans or nuts to make the correct number. Suppose the number is 10, and he only guesses 8. He must be given 2 to make it 10.

But if he guesses too many, he must supply enough to make the number come up to his guess. Suppose the number is 10, and he gusses 13. He must give 3 to make it 13.

Another good game is called Copenhagen. All the boys and girls take hold of a rope and stand in a circle. Inside the circle stands one player who is called the Dangerous Dane. It is the object of the Dane to dart toward somebody and slap his hands before they can be drawn away from the rope. Whoever gets caught must take the place of the Dane.

The game of Grammar is very enjoyable. One plays teacher and the others puplis. The teacher says; "Write a list of nouns." The pupils get to work and the teacher watches their lists. The one who first makes the mistake of writing down something which is not the "name of anything" (i. e., a noun) has a bad mark set down against him.

Then "verbs" are required, and the same procedure follows.

Next "adjectives," next "adverbs," etc., until all are ready to quit.

The "blackmark" pupils should then be made to pay forfeits in order to wipe out their black marks.

TOO SMALL TO DIVIDE.

The bright faced little lad who had applied for the position of office boy stood anxiously waiting while the proprietor pondered. The latter surveyed the young applicant with a gaze half humerous, half doutful; he had had much experience, and was not very hopeful of really valuable services.

"I wonder whether you expect to engage as a whole boy or half a boy—half a boy, most likely," he said, musingly. The gray eyes in the freckled face flashed inquiringly wide, and he explained, "Oh, I don't mean to question your having the requisite number of arms and legs; your body's all right; it is your mind I am talking about—your thoughts, wits, memory. I suppose you have a host of schemes and employments of your own that will be a great deal more important than anything here. You are interested in ball games and——"

"Yes, sir; I like ball first rate; but when I am here, I'll be all here, and when I am through here, I'll be all there. I'll play for all I'm worth in both places, but I ain't big enough to divide."

He gained his place, and he is true to his word; but his opinion of himself is one that might as well be widely adopted. Few of us are "big enough to divide" in the sense of giving only half our mind to the duty in hand.

The Cow as An Ivory Mine.

In addition to furnishing sweet and sour milk, convertible into almost anything, from cheese to the au lait for coffee, the meek and lowly cow is finding an increased field of usefulness.

Through the genius of Chicago, the cow long ago furnished fresh and corned steaks and roasts; was embalmed in beef and preserved in appetizing soups and strengthening beef extract; gave its bones and blood to make handles and buttons, and furnished soap for the toilet, fertilizer for the farmer and brains for the patron of the ala carte restaurant.

But the Germans have found a new use for milk. Out of the cascin from the dairy they are making all kinds of things in "ivory." The white buttons on your clothes, your playing cards, your ivory cigarette case, your cigar holder are likely as not the triumphant product of the unrivaled cow. She has ventured into the realm of chance through the medium of the poker chip, and entered the precincts of music through the ivory-white keys of the piano.—Baltimore Sun.

FARM AND GARDEN

A cow should not always be judged by what she is doing, but by what she might do if given a proper chance.

Cracks in the poultry house create draughts that cause croup. Fresh air is a tonic, but it depends on the way your fowls get it.

Don't allow the cow to be disturbed while she is lying down chewing her cud, as this is the time when she is grinding feed into dollars.

Secretary Wilson says the butter product has become the second in importance of all the farm products, and still most farmers consider it only a side issue.

Prof. Bolley, of the North Dakota Experiment Station, announces the interesting news that spores of red rust are capable of withstanding dry winds and intense cold, which is rather against the supposition that they were quick to germinate and short of life.

Eggs from hens closely confined should not be used for hatching purposes; the chicks would likely be weak. The condition of the hen at the time of laying has much to do with the fertility of the egg. Healthy, properly fed hens are the ones that produce the fertile eggs.

The American people have eaten more mutton the last year than ever before and are eating up their sheep faster than they can breed them. This is a good thing in a way, for there is no more profitable animal to keep on the farm than the sheep when present prices for wool and mutton prevail.

How the Merinos loom up at the present prices of wool, and still how the heavy lamb looms up at the present prices of mutton! The hen that lays and still makes meat; the horse that trots and still can pull, is like the sheep that mutton makes with an enormous fleece of wool—all hard to find.

"Haste makes waste" in gardenmaking. Wait until you are sure that the seed will not rot, for the seed will not germinate if the soil is wet and cold. If you plant your own seed in hotbeds, such as tomato, cabbage, pepper and celery, you will not have to spend any money except for seeds and tools.

The Pennsylvania experiment station reports an experiment in feeding cattle in a barn and in a lot with access to open sheds. It shows that the gains made by fattening steers are not increased by warm quarters. It is not possible to have stables too cold for fattening steers provided they are kept dry and well bedded.

Paid $40,000 to Farmers.

The co-operative creamery at Lyme, N. H., received the past year 369,269 pounds of cream and 1,847,723 pounds of milk. Its patrons were paid nearly $40,000, receiving an average of 23 2-3 cents a pound for butter.

Birds as Grafters.

Birds often practice the art of grafting. The mistletoe, living as a parasite upon the branches of large trees, has clusters of small white berries which contain the seed. They are transferred from branch to branch by adhering to the bill; the bird pecks into the bark to remove the seed, which thus becomes engrafted into the tree.

Cost of the Apple Crop.

At a recent fruit meeting in western Massachusetts one speaker quoted growers as stating if they got $1 a barrel for their apples delivered at their station it was a profitable industry. A number of growers present briskly disputed the statement. One man said that the only way to make a profit at $1 would be to steal the barrels, which usually cost from twenty-five to thirty cents each. It was concluded that the grower must realize $1 net to place the business on a satisfactory basis.—Massachusetts Ploughman.

For San Jose Scale.

Many fruit growers know the San Jose scale from sad experience. These, and any others whose plants are affected with this pest, should prepare at once to spray them with the lime-sulphur preparation. This is the best time to treat the San Jose scale, as farm work is not now so pressing. If this work is postponed until spring, it may not be done at all. The formula recommended for use in this State is as follows:

Lime (unslacked), 30 pounds; sulphur (flour or flowers), 30 pounds; salt, 10 pounds; water, 100 gallons.

Girdled Grapes.

Grapes are not as extensively girdled as they were some years ago in this vicinity, there being only two growers who practice it to any extent. One man I talked with said he always girdled a few to have them for earlier use, as it advances the ripening ten to fourteen days, says a writer in Rural New Yorker. When ripe no apparent change in quality is noticeable. Where it is largely done, as I have seen on the shores of Seneca lake, they have a tool that clasps around the vine, and, having a knife on each edge, at right angles to the vine, it is held somewhat like a pair of pincers. With one turn around the bark it is severed in two parallel cuts about an inch apart, and the intervening bark is easily removed. The object is to retard the return of the sap, which seems to or does stimulate the ripening, also the size of the fruit. Not all the bearing wood is thus treated on the vine at the same time, and it seems to do no injury to the remaining growth. It is pursued year after year by some very large growers on Seneca lake, N. Y.

Value of Bread Wheats.

Experiments in determining the food values of varieties of bread wheats are being carried on at the Kansas State agricultural college experiment station. About 181 new varieties of wheat have been originated since 1899 by Prof. A. S. Hitchcock and Prof. H. L. Roberts, former and present botanists.

Samples were secured fom all over the world, and Prof. A. M. Ten Eyck, agriculturist, is growing those that have been successfully crossed. In these experiments it often takes several years to produce a quantity of grain that will yield sufficient flour for baking tests. A miniature single horse-power rolling mill, costing $300, has recently been installed at the college by Prof. J. T. Willard, chemist.

When to Market Ducks.

When to sell ducks that are being raised for market is a question that must be settled by every man who is trying to make money out of ducks. It is supposed that ducks are ready for market at about ten weeks of age, and it is certain that if they are sold at that time they will yield a greater profit than if kept for some months longer. During the growing period ducks are making gain rapidly and are doing it at little cost. After the eighth or ninth week the gain is made less slowly, but the cost of feeding continues and even increases. Every week the birds are fed after that decreases the possibility of profits. Some poultry raisers say, "Sell the ducks as soon as they are well feathered."

The farmer of fifty years ago was not supposed to be an educated man. In fact, it was thought that the less education he had the better farmer he would be. To-day the successful farmer is almost of necessity an educated man. The more he reads and thinks the more he knows and the greater his success. More people are considering the farm to-day than ever before and it is only a lack of experience and the accompanying lack of self-confidence that keeps many a man at a desk in the city who really longs for life on a farm. It is not an unusual thing to see telephones, electric lights and power, and type writers in the homes of our enterprising farmer friends. The boy who knows the farm has no call to the city. The land is calling for him, and others, too.

Don't Mix the Breeds.

If there is one mistake more likely to be made than another by the novice in poultry raising it is the tendency to keep several breeds. The expert can do this with more or less profit because he understands how to keep them separated or, if he wishes to cross them, understands this as well. The novice, on the other hand, is too often inclined to experiment. He thinks the crossing of two certain breeds ought to give him the finest fowl on earth and keeps at it until the blood is pretty well mixed and finds, to his dismay that the cross is not so good as the poorest of the clean breeds. Again he tries Rocks one year and then becomes enamored of the Wyandottes and gets a few; the next year the Leghorn appeals to him, and so on until he has the time of his life keeping them separated or, as in the first case, becomes involved in a hopeless mixture. Look well into the subject and ascertain as nearly as possible which breed meets the requirements, then get that breed and stick to it through thick and thin until you prove it valuable or worthless.

Increase in Apple Crops.

Consul Mahin, of Nottingham, forwards a report based upon publications in German newspapers describing experiments looking to the improvement of declining apple orchards:

Of five long rows of apple trees one row was left untreated and the four others had different combinations of manurings. The row left unmanured gave 104 pounds of apples per tree during the five years from 1900 to 1904, both inclusive, and in the fifth year (1904), which was the year of maximum yield for the entire orchard, the weight of the apples per tree was 55 pounds and the number 294. The best results from manuring were obtained by a complete manure, consisting of 1¼ pounds of sulphate of ammonia, 1½ pounds of muriate of potash, and 3½ pounds of basic slag per tree per annum, applied to the roots during the winter. During the five years the yield per tree from this dressing was 163 pounds of apples, while by the fifth year the bearing increased to 401 apples, weighing 105 pounds, per tree—that is, the weight of the apples per tree increased by this manuring from 55 pounds on the unmanured trees to 105 pounds on the manured trees, or 90.9 per cent; while the number of apples increased from 294 to 401 per tree, or 36 per cent. The increase in the average size of the apples is remarkable. Those from the unmanured trees averaged 2.98 ounces each, and those from the manured trees, 4.19 ounces each.

The Farm Salesman.

Farmers who have observed closely know that people who live in towns and cities are prone to be more or less impressed by the appearance of the man who interviews them, no matter on what subject. Let a cleanly man neatly dressed stop at a house to sell any product of the farm, and the housewife will gauge his wares by his own appearance. Combine with a pleasing personality good products attractively packed, and one has found a ready way to good markets. If you don't believe this try it.

As an example, on a broader scale, the writer sells potatoes to the stewards of some of the largest hotels in a large city. These tubers are selected for this special trade and a good price is obtained for them. When the thought of this field first occurred to me, the question was how to get at the men I wanted.

I made several attempts dressed in my "second best" suit, going to the hotel and asking to see the steward. I rarely saw him. I then put on the best clothes I had, had some neat cards printed giving my business as a grower of potatoes for hotel trade, and set out to ask for the manager.

In a small hand bag I carried a few specimens of potatoes wrapped singly in tissue paper. I had less difficulty in seeing managers than formerly I had had in getting at the stewards. I generally saw one or the other, and though I did not always make a customer, I was treated with courtesy, which would not have been the case under other conditions.—Indianapolis News.