Agricultural

A SIMPLE FRUIT CELLAR.

Design for One That Will Keep Garden Truck.

Doubtless many readers of the Scientific American have found it difficult to keep apples and the produce of their gardens, such as carrots, beets, turnips, celery, etc., in perfect condition until they could be used, writes F. A. Kaiser. The occompanying drawings show a cheap and easily made fruit cellar in which I kept twelve bushels of apples, besides carrots, squashes, and potatoes, from October until April. My house was six feet wide, eight feet long and six feet high, and cost me about $4. Smaller ones

A Simmple Fruit Cellar.

can be built for a proportionally smaller sum.

I dug a hole about eighteen inches deep and set the house over it, as shown in the cross section. The entrance is made like a box, about twelve inches deep, so that soil or manure can be spread over the roof to a depth of about ten inches. Cleats A on the inside of the opening hold slats B at the bottom of the box opening. In the space C I stuff an old tick filled with straw or leaves. Outside cover D protects the tick from moisture. The rafters should be about two inches square, or 1x3. Provide a chimney, E (of wood), which must be stuffed with straw during zero weather. The chimney is not absolutely necessary, as the house can be ventilated through the door during mild weather. The proper slant for the roof is about 45 deg., as earth can be packed on at that slope. Cover the roof with a cheap grade of building paper, or with newspaper, before putting on the earth, but do not use a paper that has a strong smell, like tar paper.

I have had this house in use now during three winters, and it has saved me more than its cost every year. Apples and vegetables keep fresh and plump in it, and do not shrivel up as they will in an inside cellar.

Farmers Must Watch the Crop.

In order to determine what elements of plant food are deficient in a soil, it is necessary to carefully study the growing crop. Many farmers seem to be of the opinion that a chemical analysis of the soil will show the amount of plant food contained therein. This however, is a mistaken idea. The chemist can only determine approximately the amount of nitrogen, phosphoric acid and potash in soil, without specifically showing what proportion of these elements can be taken up by the growing plant. A large percentage of these elements is not available to plant food. Hence the necessity for them in an available form. We must turn, then, to the crop, and by watching it closely during its growth and by a careful examination when matured, see whether the soil is deficient in plant food and what elements are lacking.

Weeds.

Certain weeds are prevalent in alfalfa fields. The chief ones are dodder, sweet clover, Russian thistle and squirrel-tail grass. One of these dodder, is a parasite on the alfalfa. The others are all pernicious because they occupy space that should produce alfalfa.

Dodder, or "love-vine," germinates from seed and the young plant, when of sufficient height, entwines itself about the alfalfa stem and then becomes disconnected from its own root and thenceforth feeds upon the alfalfa plant.

Fall Care of Sheep.

The fall season of the year is a critical period with the sheep grower. As this is the mating season it determines to a great extent what his profits shall or shall not be. Hence careful attention should be given to the ewe flock and to the ram by those who would profit largely in the sheep raising business.

Rotate Garden Crops.

Rotate the crops in the garden. Land that grew any of the cabbage tribe last year should be planted to beans or some other class of plants this year. Many troubles like club-foot will thus be avoided. As a rule, follow root crops with those which grow above ground.

If orchard grass is not sown thickly it will not be a success. Three bushels to the acre should be used. Orchard grass is more vigorous than timothy, with a stronger root system; but if a permanent meadow is expected it must be top-dressed freely.

Some claim a solution of saltpeter will kill cabbage worms without injuring the cabbages. Use air slaked lime for bugs of any kind that infest cucumbers, squashes, pumpkins or melons.

Saturday Night Talks

By Rev. F. E. DAVISON
Rutland, Vt.

THE THREE FOLD MISSION OF THE KING.

International Bible Lesson for Mar. 27, '10—(Matt. 4:23).

The mission of the king as thus far traced consisted of just three things—teaching, preaching and healing. He was first of all a teacher.

Christ the Teacher.

As a Teacher He made plain much that had been obscure, and misinterpreted. The whole Jewish nation had been under the tuition of men who were blind leaders of the blind, and they had all floundered in the ditch together. But when the King spoke He taught as one having authority and not as the scribes. He deliberately upset much of the teaching of the men of his day, and did it so thoroughly, clearly and simply, that the common people heard him gladly. His words appealed to them as reasonable, intelligent and easy of comprehension. The tendency on the part of all mere human teachers is to befog, confound, obscure, make it difficult for the untrained mind to follow. But when the King opened His mouth He taught them, and the wayfaring man though he were very simple could not err therein. He explained the teachings of Moses and the Prophets to the utter confusion of the scribes and Pharisees. He showed how utterly they had misconstrued the meaning of the simplest language of the word and led the people out of the darkness into the clear light of truth. As a wise teacher the world has never seen His equal and never will.

Christ, the Preacher.

But He is also a Preacher. A teacher gives instruction, a preacher arouses to action. The sermons of the king are incomparable, they are masterpieces, for generations they have been the models upon which sermonic literature has been founded. The nearer the preacher approximates to the Sermon on the Mount or the subsequent utterances of the King the nearer he comes to being a model preacher. Christ never had any difficulty in reaching the masses, a thing that troubles modern preachers mightily. Wherever He set up His pulpit the people thronged Him, until exhaustion compelled repose. He knew what he wanted to say and He knew how to say it so that all would understand. He was not a man pleaser by any means. His words often cut men to the heart, they sometimes gnashed upon Him with their teeth, but they always bore testimony that He preached as one sent from God, sure of His message and sure of its truth, and applicability to those whom he addressed.

Christ, the Healer.

And in the next place He was a great Healer. He came out of eternity bearing all the virtue of that unsoiled world in His hands for suffering humanity. He instructed the minds of men. He aroused the souls of men and He healed the bodies of men. Disease fled at his approach as the darkness flees before the sun. Chronic ailments that had defied the doctors were banished from the patient with a word. Distance was no barrier and death itself gave up its victim at His command. He was the world's life giver.

Disciples' Credentials.

And this three fold mission of the King He transmitted to His disciples. In His final commission to his ambassadors He conferred upon them all these prerogatives. In the tenth chapter of Matthew we are told, And when He had called unto Him His twelve disciples, He gave them power against unclean spirits to cast them out, and to heal all manner of sickness and all manner of disease. There is the healing commission. And His final word was, Go ye therefore and teach all nations. There is the teaching. And finally in the eighth chapter of Acts we are told. Therefore they that were scattered abroad went everywhere preaching the words. There is the preaching. Teaching, preaching, healing that was the mission of the King; that was the commission of the disciples. And it is evident that the people were instructed and were intelligent along that line; for in the epistle of James we find a most remarkable statement concerning the administration of the church when he says, (James 5:13) Is any afflicted among you? let him pray. Is any merry? let him sing psalms. Is any sick among you? let him call for the elders of the church; and let them pray over him, annointing him with oil in the name of the Lord; and the prayer of faith shall save the sick, and the Lord shall raise him up; and if he have committed sins, they shall be forgiven him. Confess your faults to one to another, and pray one for another, that ye may be healed.

Perpetual Credentials.

That is the way it was in the beginning. And there is no record that shows where that credential was removed from the church. It is a lost credential, but it is not a withdrawn credential. The church has mislaid it, but it has never been recalled. And all down through the ages, men of God have risen up who have recovered this matchless, divine credential and used it with all its old-time power. It has been counterfeited, but that has only demonstrated its genuineness. It has been claimed by frauds and fanatics, but that has not invalidated its authority. Now, as in all past time the true ambassador of the King is fully authorized to teach the ignorant, preach to the sinful and heal the sick.

POETRY WORTH READING

The Bedtime Kiss.

O mothers, so weary, discouraged,
Worn out with the cares of the day,
You often grow cross and impatient,
Complain of the noise and the play;
For the day brings so many vexations,
So many things going amiss;
But, mothers, whatever may vex you,
Send the children to bed with a kiss!

The dear little feet wander often,
Perhaps, from the pathway of right;
The dear little hands find new mischief
To try you from morn until night:
But think of the desolate mothers
Who'd give all the world for your bliss,
And, as thanks for your infinite blessings,
Send the children to bed with a kiss!

For some day their noise will not vex you,
The silence will hurt you far more;
You will long for the sweet children voices,
For a sweet childish face at the door.
And to press a child's face to your bosom
You'd give all the world for just this;
For the comfort 'twill give you in sorrow,
Send the children to bed with a kiss!

An Unlucky Man.

"Never had no luck,
Anyway," he sighed.
"Fate has kep' me down,
Or, at least, has tried;
Never found a cent—
All I've got I earned;
No such word as luck
Fur as I'm concerned.

"Never had no help
Anywhere," he said.
"Always had to work
For each bite o' bread,
Never took a chance
That I wasn't caught;
Never won a bet,
But I've lost a lot.

"Never had no fun
All my life," he cried.
"Wish when I was born
I could just of died.
Bet you when I'm gone
They'll invent some way
Folks can live right on
Till the judgment day,
'Cause that there'ud be
Just my luck," said he.

—S. E. Kiser, in Chicago Times-Herald.

Specialized Fiction.

For merchants of hardware, a hero like this:
Keen, wiry, with plenty of brass;
Give the iron-jawed man
Nerves of steel, and he can
Compete with the best of his class.

The jewelry trade want their heroines bright,
A golden-haired damsel for choice;
With an ivory skin,
Pearly teeth—and they pin
Their faith to a silvery voice.

The villain for seafaring men should be deep,
And able to compass his ends;
With a wave to his hair
And a frank, breezyair
When stacking the deck he intends.

In works for the grocer, a good spicy plot
And style full of ginger will tell.
These hints for romances
Should add to your chances
Of writing a book that will sell.

—Eunice Ward, in Puck.

Life is So Fleet.

Life is so fleet!
So many things to learn we see,
So much we would achieve must be
Left incomplete.

Life is so fleet!
It seems that we might better bear
Our cares and sorrows and our faith,
Dear dreams' defeat.

Life is so fleet!
A day of sunshine and of rain;
Then other souls will, in the main,
Our lives repeat.

Life is so fleet!
O weary ones, of this take heed,
Full soon comes that for which ye plead,
That rest so sweet.

—Margaret Manning.

Song of the Aeroplane.

I race the eagle to his crag,
My pinions brush the sky,
My course is set toward the stars,
A man-made bird am I.
My bamboo frame is light and strong,
My planes are white as snow,
My motor sings a merry song,
As up and up I go.

Uncharted whirlpools of the air
In vain my way menace.
A master hand is guiding me
Across the arc of space.
I dip and dance, and gleam and glance,
Above the clouds I rise,
To vanish in the distant blue,
The conqueror of the skies.

PLENTY OF HIM.

Ruse That Enabled the Parson to Get a Good Sleep.

Rev. Daniel Isaacs once alighted at an inn to stay the night. On asking for a bed he was told he could not have one, as there was to be a ball that evening, and all the beds were engaged.

"At what time does the ball break up?" asked Mr. Isaacs.

"About 3 in the morning, sir."

"Well, then can I have a bed until that time?"

"Yes, certainly; but if the bed is asked for you will have to remove."

"Very well," replied Mr. Isaacs, and away he went to get between the sheets.

About 3 in the morning he was awakened by loud knocking at his chamber door.

"What do you want?" he asked.

"How many are there of you in there?" inquired a voice.

"There's me, and Daniel, and Mr. Isaacs, and an old Methodist preacher," was the reply.

"Then there's plenty of you." And the speaker passed on, leaving Mr. Isaacs to enjoy his bed.

NOT SO BAD.

Nervous Lady—Don't your experiments frighten you terribly, professor? I hear that your asistant met with a horrible death by falling four thousand feet from an aeroplane.

Aviator—Oh, that report was greatly exaggerated.

Nervous Lady—Exaggerated! How?

Aviator—It wasn't much more than two thousand five hundred feet that he fell.

Would Jar Anybody.

John Parker, the town marshall of Harrisonville, Kan., avers that he overheard the following conversation between two little girls who are not yet old enough to go to school. "What makes a horse act naughty when he sees an auto?" one asked. "It's this way," replied the other: "Horses is used to seein' other horses pullin' rigs, and they don't know what to think of 'em goin' along without a horse. I guess if you was to see a pair of pants walkin' down the street without a man in 'em you'd be scared, too."

The Dun Courteous.

A Michigan implement dealer, rather tardy in paying up, received the following letter from a wholesale house:

"Our cashier fell unconscious at his desk this morning. Up to this time, 4 p. m., we have been unable to get a word out of him except your name. May we say to him, with a vie to his immediate recovery, that we have your check, as we think that is what is on his mind?"

Learned It By Ear.

The dear little girl arose, bowed and recited it in this manner:

"Lettuce Denby up N. Dewing,
Widow Hartford N. E. Fate;
Still H. E. Ving, still per Sue Wing,
Learn to label Aunty Waite."

Then, with tumultuous applause of the audience ringing in her ears, she sat down in happy confusion.—Chicago Tribune.

A Little Too Early.

Senator Spooner of New York is a famous story teller and invariably original. He was telling a new one to a group of senators at the New Willard shortly before he resigned.

"Isn't that one of Senator Depew's stories?" asked one of his audience.

"Not yet," was the retort that turned the laugh.

Innocence at Home.

The cartoonist's wife was talking to a friend.

"I just know Fred didn't want to work at the office last night," she said.

"Why, how do you know?" was asked.

"Because in his sleep he said, 'Well, I'll stay, but I don't know what to draw.'"

An Exception Noted.

"Honesty is the best policy," she sighed softly.

Whereupon he stole a kiss. Later she admitted that there are exceptions to all rules.—Detroit Free Press.

In the Wardrobe.

First Moth—Hello, neighbor! I see you are dressed for the ball.

Second Moth—Yes. How do I look in this dress suit?

Personal.

Magistrate (discharging the prisoner)—Now, then I would advise you to keep away from bad company.

Prisoner (feelingly)—Thank you, sir. You won't see me here again.

Turned 'Em Out.

"The motto of our party is 'Turn the rascals out!'"

"Well, I guess your party has turned out more rascals than any other."

'Phone Might Have Saved Caesar.

Julius Caesar missed a great deal in not knowing the telephone, or at least in not using it if he knew it. One can see the telephone engineer attached to the Roman Post Office endeavoring, but without avail, to get an instrument installed at the Capitol and at the palace. "I am intrusted by the Emperor to say that he does not desire these barbarian novelties and so Thomas Alva Edisonus need not call again with his magician's apparatus." A signal blunder! We can imagine what would have happened. "Hallon! 1287 Tiber! Is it thou, Artemidorous? I understand thou rangst me up this morning. "What? Details of a plot? Go not to the Senate to-day? Beware of Brutus? Go not near Casca? Right, and I thank thee, Artemidorous. I will have an extra guard put on instantly and the conspirators arrested." And so, although Artemidorous was unable to give his warning in the street, he gave it over the telephone, and Caesar's valuable life, and with it the fortune of Rome, was saved.—From "If They Had Thought of It," in the Strand.

Notched the Spotters.

Charlie Mann, who has been superintendent of the House press gallery, Washington, since Johnson was impeached, let go of a secret which ought to make half the travelling population of America examine their shoes.

Mr. Mann was a Pullman conductor once upon a time. He says the conductors were a blameless lot in his time and are to-day, but the porters bent most of their efforts to spotting "spotters.' The "spotters" were men sent out by the company to ride on the cars and keep tab on the conductors.

"Every time a porter suspected a passenger of being a spotter," said Charlie, "he would cut a notch on the inside of the heel of his shoe. After that a man with a notched heel was watched every time he rode on a train. Lots of times the porters made mistakes, and many a man got a rough deal on a Pullman car just because his heel happened to be cut by mistake."

How They Face Death.

A British medical man thus tells his experience of how men and women face death: "Tell the man of higher type and greater intelligence, he says, that he is facing death, and he begins to fight, demands a consultation, talks about going to specialists and fights grimly to the finish. Tell a woman the same facts, and she lies back to await her fate. All women are fatalists. On the other hand, tell a man that he has one chance in a thousand to recover if he will undergo an operation, and he will trust to his own strength and endurance rather than undergo the knife. The woman will choose the thousandth chance, and submit to the operation with astounding calmness.—Canadian Odd Fellow.

West Indian Sugar Planter Producing It on a Considerable Scale.

Franklin D. Hale, consul at Trinidad, reports as follows on the progress in the utilization of waste materials in the West Indies for paper-making:

About two years ago Bert de Lamarre, of Orange Grove, Tacarigua, Trinidad, the owner and operator of a sugar estate, commenced in a small way to manufacture pulp and paper from cane waste or megass, and bamboo fiber, importing special machinery therefor. Although his efforts were largely experimental, he reports the venture a success and has placed the new manufactured article on the market. Locally it is used for wrapping paper.

Exportations in small quantities have been made in England, Germany and France, and in March and April last, 18 bales of the paper pulp, weighing 18,328 pounds, were shipped to New York. The value as invoiced here was $6.70 per 100 pounds. Mr. de Lamarre claims that by a further improvement in the methods of manufacture, perfect results may be obtained and paper successfully manufactured from megass and bamboo fiber.