

AGRICULTURAL



For Watering Stock.

No matter how pure a source of supply may be at hand for watering stock, if it is pumped into an open trough and left exposed for any length of time it soon becomes polluted and unfit for the animals to drink. This will not be the case, according to the inventor, if the stock watering apparatus here shown is put into use. If pure water is furnished to the tank or barrel to which this fountain is attached it is claimed that there is no way by which the animal that is drinking can make it foul. The waterer consists of a double drinking bowl, made of cast iron, which is attached to the outside of a tank or barrel. On the inside is another chamber, inclosed in which is a brass float and lever controlling the flow of the water to the outside bowl. The fountain is automatic in its action, as the float rises with the water in the bowl and cuts off the supply when



SECTIONAL VIEW OF THE WATERER.

the proper height has been reached. As the water is always closed except when water is flowing from the tank to the drinking bowl, there is no opportunity for foreign matter to find its way to the interior of the storage reservoir.—Denver Field and Farm.

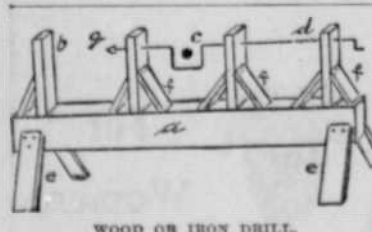
Root Crops for Stock.

There is not a farmer in business but who can readily spare an acre or two of ground on which to grow root crops. If he has any number of heads of stock he will find that he can not grow anything on the farm to greater profit than the small area named put into root crops. Mangel wurzels are among the easiest of the root crops to grow and they will grow on any soil if the soil is properly prepared. The seed bed should be deep and harrowed several times after thorough plowing. Seeds should be drilled in and from two to four pounds of seed an acre will be required. The space between rows should be kept free from weeds and when the plants are three or four inches high they should be thinned out so that they will stand fifteen inches apart.

It will be necessary to keep the field hood or cultivated until the plants get strong enough to overcome any weed growth. After this no care is necessary until fall harvest. Under this sort of cultivation it is possible to grow from 600 to 1,000 bushels on an acre, according to the condition of the soil. Carrots and turnips can be easily raised on the same plan, although for general feeding the mangels are, perhaps, more desirable.

Handy Workshop Tool.

I have a cheap force feed drill press that is very useful on my farm. A timber a 4x6 feet, is supported by legs e, like a trestle. The uprights b and d should be longer than shown, that they may be tied together at the top, as the outward strain is considerable; both center uprights are 2x4x12 inches. All uprights are braced as shown at f f f. The bit chuck c is made by bending a 1/2 or 1 in round rod into shape as shown, or may be purchased at a hardware store. A



WOOD OR IRON DRILL.

feed screw is shown at d, which may screw into the wood, or a nut may be attached to the front side of rear upright. A tool chuck g is screwed to the end of the bit stock. Loose blocks of wood are placed between the bit and the front post b as needed. By using twist drills, either wood or iron may be bored.—George T. Price, in Farm and Home.

Thumps in Pigs.

More cases of thumps among pigs are reported this year than in some time before, owing, doubtless, to the rainy weather, which prevented the pigs from getting the sunshine they so much needed. If there is anything farmers need to learn about the

handling of young pigs it is that they need sun and exercise, both in considerable quantities. An ideal pasture for young pigs is a place that may be fenced off from the main pasture where there is one or more trees which will provide shade, but where there will also be a large space of comparatively dry ground, in grass, on which the pigs may run. If there is white clover in the grass, so much the better for the pigs, and they will prevent thumps, which disease usually means death.

Sheep for the Farm.

If one is in the raising of sheep exclusively, one can afford to go into the question of fancy breeds suited to the market to which he is catering, but the average farmer who raises sheep simply as one more crop from which he hopes to derive an income, should select the breed from those most common in his section. The general purpose ewe, if this term may be applied to sheep, is the one with some Merino blood in order to obtain the heavy fine fleece. It has been observed that the animal with the close, dense fleece is the vigorous, hardy animal. The ram should be of a good cross or a pure bred, if desired, but care should be taken that he is of a breed suited to thrive in the section where he is to remain and under the conditions with which he will be surrounded. In selecting sheep for the farm it is generally wise to look after the merits of each individual regardless of the breed to which she belongs, for there are good breeds with poor members of the family just as there are good members in breeds that are not so highly rated. In most sections where sheep may be raised to advantage there is room for many more than are now raised. If farmers would go into this industry, carefully increasing their holdings as they gain experience, they could make sheep raising profitable.

Lice Troubling Pigs.

It is not unusual for swine, and particularly the young pigs, to be afflicted with lice, and the trouble is usually due to unclean quarters. If the pigs are constantly scratching they should be closely examined for lice, and if the vermin are found the pigs should be taken from the pen and the latter thoroughly cleansed. Scrub the pen thoroughly and then whitewash it. The pigs should also be scrubbed with a solution of sulphur or by using some of the sheep dips, of which there are many good ones on the market. If no lice are found on the pigs, then the trouble generally comes from improper feeding of the sow while she is nursing. If this is thought to be the case, cut the corn out of the ration for the sow and feed her largely on middlings, bran and milk for a while. Clean the pigs with the sheep dip, as suggested, which will allay the irritation.

Farm Notes.

A farmer should know enough about law to keep out of it.

No one can be found now who objects to dehorning cattle.

In butter making, next to controlling the temperature is to churn often while the cream is in good condition. Lows are given access to their mother, but as they soon find but little to supply their needs they become disgusted and readily adopt the idea of paddling their own canoe.

Many a runaway has resulted just because too much confidence has been placed in a team. There is always a feeling that "they'll stand." It pays to make teams secure before leaving them.

A stall for a horse should be five feet wide. If wider the horse will turn over and get east, if narrower he can't rest. The floor should be even and level if the horse gets the rest he should have.

A very good way to loosen a burr that has rusted fast is to cut a notch on the side of burr with a cold chisel. Cut two notches at opposite sides. The cutting will loosen it and the jarring occasioned by the strokes will assist. It may then be easily taken off with a wrench.

Some men folks on farms never think of helping make or cultivate the garden. This is considered too small a job for them, and yet they never object to partaking of what comes from it. It is "my wife's garden" when the garden is put in and when the crops are reaped it is "our garden."

Of Uncle Sam's domain of over two billion acres only 500,000,000 are left for settlement. Under the present system of land laws it will only last five years. During the first ninety days of this fiscal year 6,000,000 acres were filed upon. Uncle Sam intends that everybody shall have a farm as long as they last. His farms are going fast.

Whenever one reads of a combine where farmers are going to control prices of farm products, one should rest assured that somebody else is going to be enriched by the scheme. It is not among the possibilities to control the prices of staple farm products. All attempts to do so will prove failures. When approached to lend aid to any scheme of this character it will be well to look for the African in the fuel; he's there.

Boys And Girls

Parents Worth Having.

My father and mother can never be beat—
They're the nicest that ever were made,
They remember the fun they had when they were young,
And all of the games that they played,
And, better than all, they play with us themselves,
Yes, really and truly, they do!
Every night after dinner till bedtime has come,
There's Willie and Burton and Prue,
And Alice—that's me—and my father and mother—
Enough for some royal good fun.

We play Blind Man's Buff and Hide-and-Go-Seek.

You should see how my mother can run!
They don't either one of them mind being "it."
And they always are awfully fair,
We none of us think the game's any fun
Unless all the players are "square."
And every new game we teach father and mother;
They teach all the old ones to us;
So we romp and we play, big and little together,
With never a sign of a fuss.

But sometimes a stranger man comes to our play—

He creeps in so quiet and still
That we don't know he's here till we hear a deep sigh
From our littlest one—that is Will.
Then we know that the Sand Man has joined in our play
And is trying to put us to sleep.
Then father and mother both kiss us "good night"
—Elizabeth Jamison.

Why Vacations Are Given.

In this age of tension every boy should be taught some form of recreation that he will cling to in after life. When the thing by which he has made his fame or money threatens his very existence he can turn to this safeguard and, while his mind is pleasantly occupied, regain his physical poise. It may be yachting, canoeing on little rivers, mountain-climbing, traveling, horseback-riding or hunting. Whatever it may be, the thought and the love for it is better engendered during the formative years if there is a full understanding that it is to act as a running mate to the greater work in life and is properly and necessarily part of a boy's education.

For those who work under modern stress there is, with rare exceptions,

TAKE TO INDIAN SPOUSES.

Many Army Officers Have Wedded Squaws in Past Times.

It is announced from Fort Leavenworth that the government is taking notice of army officers who married Filipino girls after the loose fashion of the islands and then abandoned them. The particular case is one in which a young officer became engaged to a Leavenworth girl. It was known that this officer had lived with a Filipino girl near Manila after some sort of a marriage ceremony. The Leavenworth girl is said to have no objections to the facts in the case, and will marry her lover when he gets a divorce from his Filipino wife.

However, there is nothing particularly new in the revelations with respect to "morganatic" marriages by United States army officers. Before the civil war it was almost the customary thing for officers stationed in Oregon or Washington Territory to consort with Indian girls. At Tacoma or Seattle the visitor often has pointed out to him half-breeds who bear the names of some of the most distinguished of our civil war generals and who are known to be the sons or daughters of these officers. It is explained that when these officers were young lieutenants they were stationed in the wilds of the Northwest, far from the society of women of their own kind; that they needed housekeepers; that it was the custom of the region for white men to consort with Indian maidens; that, according to Indian standards, there was nothing wrong about it, and that from every standpoint it was advantageous to the girl taken for a temporary wife.

At the little town of Puyallup, ten miles from Tacoma, there are two fine-looking men who bear the name of a general who for a long time was at the head of the quartermaster's department of the United States army. These men are the sons of the general. He married the mother, a Puyallup Indian, when he was a lieutenant and stationed at the Puyallup Indian agency, long before the civil war. In later years he married an American woman in the far East and raised a family. But he did not abandon his family on the Pacific coast. His sons were taken East and put through one of the leading colleges. He frequently visited them and openly acknowledged them. On one occasion, at least, he was accompanied by his American wife, who seemed to know the circumstances and to have accepted them philosophically. His Indian wife lived for some years after he had married his American spouse, though he never visited her. But old-timers about Tacoma will tell the visitor how he made her old age comfortable, while caring as a father should for the sons of their marriage.—Kansas City Journal.

Milkmen and dancing masters are often at a loss without their pumps.

Little Stories and Incidents that Will Interest and Entertain Young Readers

always a time when the strain becomes greater than the endurance and an enforced change is imperative. The summer vacation is the expression of a physical necessity. It has come into existence in America in the last twenty-five years and it satisfies the need of many, especially the young, who have not forgotten how to play, or those, the strong among us, who learned something as boys that they still like to do as men. There are others, however, who are not so fortunately placed and still others growing up who do not realize this need.

Don'ts for Girls.

Don't talk about your girl friends; choose the true friend and drop the false.
Don't be sarcastic or envious; it may be you have more advantages and blessings, if recognized, than they whom you envy.
Don't tease brother, but help him.
Don't snub him; some think boys were made only to be scolded and just endured.
Don't be afraid of being laughed at when your motive is good.
Don't be careless, slovenly and dilatory.
Don't boast; it is the sign of weakness. "Charity vaunteth not itself, is not puffed up."
Don't be irritable and quick-tempered.
Lastly, later on—
Don't lose your sweet womanliness.

Luck and Labor.

If the boy who exclaims "Just My Luck" were truthful he would say "Just my laziness" or "Just my inattention."
Luck is waiting for something to turn up.
Labor, with keen eyes and strong will, will turn up something.
Luck lies in bed and wishes the postman would bring him news of a legacy.
Labor turns out at 6 o'clock, and with a busy pen or ringing hammer lays the foundation of a competence.
Luck whines.
Labor whistles.
Luck relies on chances.
Labor on character.
Luck slips down to indigence.
Labor strides upward to independence.—Northwestern Christian Advocate.

COMPOSITION OF THE BRAIN.

Some Sort of Material Is in Nerve Cells as in Other Parts of the Body.

Whether it be the brain cell of a glow-worm or one trembling with the harmonies of Tristan and Isolde, the stuff it is made of is much the same; it is a difference in structure, apparently, rather than of material. And the chemical difference between a brain or nerve cell and that of the muscles or the skin seems reducible mainly to a difference in the proportion of two substances—water and phosphorus. Lean beef, for example, is from 70 to 80 per cent water; the brain is from 90 to 95 per cent water. And a brain or nerve cell maw contains from five to ten times as much phosphorus as, let us say, the cells of the liver or the heart. The actual quantity is, of course, extremely small by weight but a fraction of 1 per cent.

About three pounds avoirdupois of this very complex phosphorized stuff make up an average human brain. There is a lot more of it distributed down one's spinal column, and little plexuses all over the body, wherever a group of muscles are to be moved; and others still, the sensory or feeling nerves, which are everywhere. It is hard to find a cubical half-inch outside the bones where they are not.

All told, the nervous substance, which for the sake of making its functions clear I have called the matter which thinks, forms a not inconsiderable portion of the body outside of the bony skeleton. It is made up of distinct and separate units, for the most part extremely minute, though some attain a length of two or three feet. These units, for lack of a more misleading name, are called cells. The "cells" which run from the small of your back down into your toes and wiggle the same or inform you when a member of the family is stubbed are the longest. Those of the brain are mostly so small as to tax the powers of the microscope; their average length would be measured in thousandths of an inch. There have been many attempts to get their actual number; it is certainly large. Computations for the brain alone range from 60,000,000 upward. One, due, I think, to Waldeyer, sets the total number of brain cells (average) at 1,800,000,000. This would mean a brain population exceeding the known population of the earth.

Best Kind of a Guide.

First Sportsman—Good guide, is he?
Second Sportsman—Oh, yes! If necessary he'll do the shooting and bring home the game and let you say you did it and whip anybody that says you didn't.—Puck.

We have an idea that when a woman eats corn off the cob, it is after an inward apology to Edward Bok.

GRATEFUL, HAPPY WOMEN



MISS MURIEL ARMITAGE

Thank Pe-ru-na for Their Recovery After Years of Suffering.

Miss Muriel Armitage, 36 Greenwood Ave., Detroit, Mich., District Organist of the Royal Templars of Temperance, in a recent letter, says:
"I think that a woman naturally shrinks from making her troubles public, but restored health has meant so much to me that I feel for the sake of other suffering women it is my duty to tell what Peruna has done for me."
"I suffered for five years with uterine irregularities, which brought on typhoid fever and made me a physical wreck. I tried doctors from the most eminent of medicine, but without any perceptible change in my condition. In my despair I called on an old nurse, who advised me to try Peruna, and promised good results if I would persist and take it regularly. I thought this was the least I could do and procured a bottle. I knew as soon as I began taking it that it was affecting me differently from anything I had used before, and as I kept on taking it, I kept this up for six months, and steadily gained strength and health, and when I had used fifteen bottles I considered myself entirely cured. I am a grateful, happy woman today."—Miss Muriel Armitage.

Peruna cures catarrh of the pelvic organs with the same surety as it cures catarrh of the head. Peruna has become renowned as a positive cure for female ailments simply because the ailments are mostly due to catarrh. Catarrh is the cause of the trouble. Peruna cures the catarrh. The symptoms disappear.

Female Weakness Is Pelvic Catarrh.

Always Half Sick are the Women Who Have Pelvic Catarrh.

Catarrh of any organ, if allowed to progress, will affect the whole body. Catarrh without nervousness is very rare, but pelvic catarrh and nervousness go hand in hand.
What is so distressing a sight as a poor half-sick, nervous woman, suffering from the many almost unbearable symptoms of pelvic catarrh? She does not consider herself ill enough to go to bed, but she is far from being able to

do her work without the greatest exhaustion. This is a very common sight and is almost always due to pelvic catarrh.
It is worse than foolish for so many women to suffer year after year with a disease that can be permanently cured. Peruna cures catarrh permanently. It cures old chronic cases as well as a slight attack, the only difference being in the length of time that it should be taken to effect a cure.
If you do not derive prompt and satisfactory results from the use of Peruna, write at once to Dr. Hartman, giving a full statement of your case and he will be pleased to give you his valuable advice gratis.
Address Dr. Hartman, President of The Hartman Sanitarium, Columbus, Ohio.

Knew Her Business.

Mrs. Newed—I would like a pound of your best cheese.
Grocer—Yes, ma'am.
Mrs. Newed (examining it)—Why, this cheese is full of holes!
Grocer—Yes ma'am. That's the way it comes.
Mrs. Newed—Well, I don't want any of it. I'm not going to pay for a pound of cheese that contains a half pound of holes.—Boston Journal.

Papa's Definition.

"Papa, what is a diplomatist?"
"Any man, my son, whose wife respects him."—Life.

The Way With Bills.

Husband—You must try to keep our bills down.
Wife—I do, but they're always running up.

Indiscretion.

"Aren't the perfect trust and confidence engaged people have in each other perfectly beautiful?"
"Perfectly idiotic, I should say."
"Why?"
"Because when I was engaged I told my future wife all about my income and prospects, and now I can't spend a dollar on myself without her knowing about it."

He Stopped the Clock.

May—Oh! George, papa set the alarm for 10:30 tonight.
George—Indeed. Didn't you remark the other night that the ticking was monotonous and annoyed you?

Novel Fishing Feat.

The details of "A Novel Fishing Feat," told by Everett Foster in the September St. Nicholas, are part of the experience of the winter in Yellowstone Park a few years ago. The lad who caught the trout, and, without moving from his position, swung his catch over into Nature's pot and successfully cooked it was a young brother of Mr. Foster; and the narrator was one of those who tasted the uniquely prepared dish and found it palatable.

Where Fishhooks Come From.

Practically all the best fishhooks in the world—and nearly so of all qualities—are made at Redditch. The annual output is probably 500,000,000 hooks—about 10,000,000 per week—ranging in size from enormous and vicious-looking shark-hooks to the tiniest hooks for very small trout, with a "bend" diameter of about one-sixteenth of an inch, 1,000 of which will not more than fill a good-sized thimble.

GOOD BLOOD SPEAKS FOR ITSELF

You know when rich, red blood is coursing through the veins, for it shows in the brightness of the eye, the beauty and clearness of the complexion, the smooth, fair skin, and robust, healthy constitution. It is good blood that imparts strength and energy to the body and keeps it in a state of healthfulness and vigor. Good blood is the foundation of good health, and must be kept pure and unadulterated.

People with good blood possess strong, steady nerves and are blessed with good appetites and digestion, and enjoy sound, refreshing sleep. If we could always maintain the purity of the blood then we might enjoy perpetual health, but it becomes infected and poisoned and most of the ills that afflict humanity and undermine the constitution are caused by an impoverished or polluted condition of this vital fluid.
When the blood is diseased the skin loses its healthy appearance, and the complexion, its freshness and beauty and becomes red and rough and full of pimples and spots. Itching, scaly eruptions, blackheads, boils and rashes break out upon the body when the blood is too poor or too thin and acid, and is not supplying proper nourishment to the system. Debility, poor appetite, bad digestion, restless sleep and nervousness more often come from sluggish, impure blood than any other cause. To build up the blood, restore its lost properties and make it rich and nutritious again is the only rational treatment, and the proper way to get rid of skin troubles. There is no remedy like S. S. S. to accomplish this and it does it promptly and thoroughly. S. S. S. antidotes and removes from the blood all poisons and humors, and restores it to a normal, healthy condition, and invigorates and tones up the general health. When rich, red blood is again flowing through your veins all skin eruptions disappear, the appetite improves, the complexion clears and you get rid of those miserable depressing feelings and nervousness, and enjoy once more the blessings of good health. S. S. S. is nature's remedy for all blood and skin diseases. It contains no minerals whatsoever, and is guaranteed purely vegetable. Write for free book. No charge for medical advice or other information desired.

SSS

MISS MRS. M. R. DAVIDSON,
Hockmart, Ga.
For three years I had Tetter on my hands. Part of the time the disease was in the form of running sores, very painful and causing me much discomfort. Four doctors said the Tetter had progressed too far to be cured, and they could do nothing for me. I took only three bottles of S. S. S. and was completely cured. This was since seen any sign of my old trouble.
MRS. L. B. JACKSON,
837 St. Paul St., Kansas City, Mo.

THE SWIFT SPECIFIC CO., ATLANTA, GA.