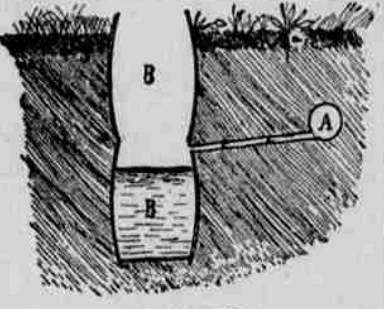




A Tile Well.

A convenient and cheap watering place for stock in pastures, away from the barn, through which tile drains run, may be made for a considerable part and often the whole season in the following manner: Three or four feet from the main drain dig a hole deep enough so that two barrels may be placed one on top of the other, the top of the lower one coming about level with the bottom of the main tile; this position for the lower barrel will bring the upper one usually a few inches above the top of the ground.

Connect the main tile to lower barrel with a few lateral tile of small size laid on slight incline and passing through the side of the barrel. Through these side tile the water will run from the main drain and keep the lower barrel nearly full of water at all times when there is the least flow in the main drain. Remove the bottom of top barrel before putting in position. Better not use salt barrels for the top ones, as stock will destroy them more or less; kerosene barrels well burned out are excellent. A pump may be used in this well or the water easily dipped with a pail by the hand or with a short pole. This arrangement prevents any refuse matter getting into the main drain, and if the well is covered none can get into it.—Farm and Fireside.



THE TILE WELL.

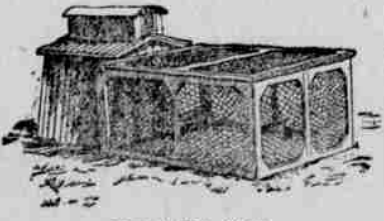
less; kerosene barrels well burned out are excellent. A pump may be used in this well or the water easily dipped with a pail by the hand or with a short pole. This arrangement prevents any refuse matter getting into the main drain, and if the well is covered none can get into it.—Farm and Fireside.

All About Bee Hives.

In the first place, it is well known that the common or black bees do not increase to such an extent under the same conditions as do the Italian bees. The honey season has also much to do with it. During a scarcity of honey bees will not increase so rapidly as if the honey flow was heavy. Also, the size of the hive has much to do with the control of swarming. If abundance of room is given black bees for storage, they will seldom swarm at all, even in the best of honey seasons. Plenty of storage room has much to do in controlling the swarming of Italian bees, but they are more liable to swarm than blacks. It is very important to have beehives just the right size, even if they are made old box fashion. A very large hive will never produce good results any way you take it. Hives should be made sectional, and if at any time more room is needed add another section. The required size, as given in our standard works, is about 2,000 cubic inches.—Kansas Farmer.

Pretty Brood'ng Coop.

F. L. Landon, of Williamsport, Pa., is one of the enthusiastic fanciers who believes that nothing is too good for his chickens. The illustration shown is that of one of his brooding coops, a most palatial affair for an old hen and her brood. It is handsomely made and painted in the highest style of the art, provided with ventilating blinds and ground glass windows. While it is doubtful if the chicks so reared are any better than those who spend their chickenhood in a dry-goods box, Mr. Landon has, at least, the satisfaction of knowing that his chicks are well



BROODING COOP.

Protected and comfortably housed in the prettiest brooding coop to be found.

Judging a Pig by Its Hair.

As an indication of the quality of a pig, the hair is made of much value to the breeder or feeder. Fine, silky hair is an indication that the flesh will be fine-grained and of good quality. Coarse, stiff hair is invariably found on an animal slow to fatten and with coarse flesh. The shrewd feeder and the shrewd breeder will reject an animal with coarse hair; such hair usually accompanies a bad disposition. Staring hair indicates an unhealthy condition of the body. By studying the peculiarities of the hair of live stock much of the internal structure and of the disposition of the animal may be learned.

Capacity of Bins and Wagons.

Every boy around the farm of suitable age should be taught how to figure out the number of bushels of wheat

and onto in the bin and how much the wagon box will hold. A wagon box ten feet long, three feet wide and twenty-five inches deep will hold 27.8 bushels of ear corn or 50.2 bushels of shelled corn. A crib ten feet wide, ten feet high and sixteen feet long will hold 711 bushels of ear corn. Of ear corn one bushel is contained in two and a quarter cubic feet. In figuring shelled corn and grain the same space will hold one and four-fifths times as much grain as it will of ear corn. A crib that will hold 800 bushels of ear corn will hold of shelled corn or other grain 1,440 bushels.—Stockman and Farmer.

Making the Soil Deeper.

Though the farmer may not want to plow deep for spring crops he always likes to have soil as deep as possible. It is an advantage to topdress even though only poor soil is used to do it with. We have known the soil dug from deep wells and spread over adjoining land to greatly help the soil after a year or two. This subsoil was rich in mineral fertility, though of course it had little or no vegetable matter. After it had been exposed to frost one or two winters it produced good small grain crops, though manure was needed when corn, potatoes or other hoed crops were planted on it.—Exchange.

Dandelion Greens.

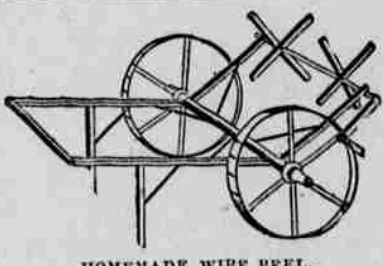
Every housewife knows that dandelion greens are excellent for the table, and none the worse because they are slightly tonic to the stomach and aid digestion. But all do not know that the dandelion under good cultivation grows much larger than in its wild state, and is therefore much more easily gathered, cleaned and prepared for the table. It is considerably grown for greens by market gardeners, who find it a fairly profitable crop. Probably if farmers planted the improved varieties of dandelion they could find a good market in nearby cities or villages along with other produce.

Unevenly Matched Teams.

It was an old command of the Mosaic law not to yoke the ox and the ass together. This was not by any means an arbitrary rule. It had sound reason behind it. The slow ox and the quicker ass could not pull true, and neither could do its best when thus coupled. Whenever teams travel unevenly there is constant jerking the yoke from one side to the other, causing galls that soon require a long period of rest to heal. When the team is matched so that it will pull true, it will do more work, and without either animal in the team being injured.

Barbed Wire Reel.

The reel is made up of two cultivator wheels, a 3x3 inch timber for an axle



HOMEMADE WIRE REEL.

handles, uprights, braces, etc., put together as shown in the illustration. One person guides the reel by holding the handles while another turns the crank.—Orange Judd Farmer.

Tomatoes Grown by the Acre.

Many farmers now find the tomato a fairly profitable crop. They require moderately fertile land, but not so rich as the vines find in ordinary garden culture. Very rich land makes too much foliage and delays ripening of the fruit. It is not expected, however, that field tomatoes shall be earliest in market. More often their best sale comes late in the season, when there is demand even for the unripe fruit to be made into pickles with other vegetable products of the garden.

A Foultry Table.

An ingenious statistician has drawn up a table to show how many eggs the various kinds of domestic fowls lay per annum, and how many of the eggs go to the pound:

- Geese, 4 to the pound; 30 per annum.
- Polish, 9 to the pound; 150 per annum.
- Bantams, 16 to the pound; 100 per annum.
- Hamburgs, 9 to the pound; 200 per annum.
- Turkeys, 5 to the pound; 30 to 60 per annum.
- Game fowl, 9 to the pound; 160 per annum.
- Leghorns, 9 to the pound; 200 per annum.
- Plymouth Rocks, 8 to the pound; 150 per annum.
- Langshans, 8 to the pound; 150 per annum.
- Brahmas, 7 to the pound; 130 per annum.
- Ducks, 5 to the pound; 30 to 60 per annum.—Farm News.

An Old Synagogue.

At the foot of Mount Mithridates, on the south coast of Crimea, is a synagogue which dates back 1,300 years. Almost destroyed during the Tartar conquest, it was restored in 1788 by Catherine. There are seventy families in the place, and as there is only room for fifty worshippers in the synagogue it is to be enlarged.

KEEP IN SHAPE.

From the largest cities down to the smallest towns this is the month for the beginning of out-door sports of all kinds, and also the beginning of the season when sprains, bruises, hurts and mishaps are as plentiful as huckleberries. Every Spring this is a common experience, and the common experience has settled down to this, that the best thing to do is to be provided with a supply of St. Jacobs Oil for emergencies of the kind as an especially sure cure for the worst sprain or the blackest bruise. Sportsmen, athletes, ball players and oarsmen have known this for many, many seasons, and reference to it is now only a reminder to get your supplies. Hard strains and overwork of the muscles will bring pains and aches and sportsmen know what's best and are never without the surest cure in the use of the great remedy.

Road Rights in Germany.

Foreigners who visit Berlin will do well to observe that rule of etiquette which precludes a person when out driving or riding from passing people of high rank.

Thus, a stranger, an American, it is said, was arrested the other day in the Thiergarten, for having ventured to drive past the carriage conveying the young Crown Prince and his brother on their daily drive.

The royal vehicle was proceeding at a relatively slow pace, and, as the stranger was driving a pair of spirited horses, he saw no harm in driving past and ahead of the Prince.

This rule has always prevailed with regard to military officers, a young lieutenant or captain never venturing to give his dust to his major or his colonel, while the latter, in his turn, is content to follow in the wake of his general.

ROCKED ON THE CREST OF THE WAVES.

The landsman, tourist or commercial traveler, speedily breathes, and not only begins, but continues, to feel the extreme of human misery during the transit across the tempestuous Atlantic. But if, with wise provision, he has provided himself with a supply of Hostetter's Stomach Bitters, his pangs are promptly mitigated, and then cease ere the good ship again drops her anchor. This is worth knowing. And thousands of our yachtsmen, summer voyagers, tourists and business men do know it.

Electricity has been adopted as the motive power of the machinery in connection with the drainage system in New Orleans.

HOME PRODUCTS AND PURE FOOD.

All Eastern Syrup, so-called, usually very light colored and of heavy body, is made from glucose. "Ten Garden Drops" is made from Sugar Cane and is strictly pure. It is for sale by druggists and grocers only. Manufactured by the PACIFIC COAST SYRUP CO. All genuine "Ten Garden Drops" have the manufacturer's name lithographed on every can.

Watercolor drawings will, it is said, last four hundred years if they are protected from direct sunlight.

STATE OF OHIO, CITY OF TOLEDO, Lucas County.

FRANK J. CHENEY makes oath that he is the senior partner of the firm of F. J. CHENEY & CO., doing business in the city of Toledo, County and State aforesaid, and that said firm will pay the sum of ONE HUNDRED DOLLARS for each and every case of Catarrh that cannot be cured by the use of HALL'S CATHARRH CURE. FRANK J. CHENEY. Sworn to before me and subscribed in my presence, this 6th day of December, A. D. 1886. A. W. GLEASON, Notary Public.

Hall's Catharrh Cure is taken internally and acts directly on the blood and mucous surfaces of the system. Send for testimonials, free. F. J. CHENEY & CO., Toledo, O. Sold by Druggists, etc. Hall's Family Pills are the best.

The most extensive cemetery in the world is that at Rome, in which over 6,000,000 human beings have been interred.

Newton calculated the speed velocity of the comet of 1860 to be 880,000 miles an hour. Brydone rated the speed of the comet he saw in 1770 at 2,500,000 miles an hour.

Piso's Cure for Consumption is the only cough medicine used in my house.—D. C. Albright, Mimbunburg, Pa., Dec. 11, '95.

A mustard pot which does not require the use of a spoon has been invented in Germany. The mustard is supplied through a little spout by pressing on a spring.



Has for a Fifth of a Century Cured all forms of . . .

KIDNEY and LIVER DISEASES. THE DREAD BRIGHT'S DISEASE Is but advanced Kidney Disease. Either is Dangerous. Both can be Cured if treated in time with Warner's Safe Cure. Large bottle or new style smaller one at your druggist's. Ask for either and accept no substitute.

BASE BALL GOODS Special Rates TO CLUBS.

We carry the most complete line of Gymnasium and Athletic Goods on the Coast. SUITS AND UNIFORMS MADE TO ORDER. Send for Our Athletic Catalogue. WILL & FINCK CO., 818-820 Market St., San Francisco, Cal.

CHILDREN'S SYRUP should always be used for children's coughing. It soothes the child, cures the cough, drives all poisons, cures whooping cough, the best remedy for diarrhoea. Twenty five cents a bottle. It is sold by all druggists.



Beggar—Please, sir, I'm so exhausted I can't get my breath and— Gentleman—Here's 5 cents; go and buy one—Harlem Life.

"How dreadfully stout the general is getting!" "Yes, isn't it fortunate! Otherwise he wouldn't be able to wear all his medals!"—Punch.

Mr. New Hub—What does it mean when a bride promises to obey? Mrs. New Hub—Simply that she prefers not to make a scene.—Puck.

"Is that a good hen, Uncle Josh?" "A good hen?" said Uncle Josh, "why, that 'ar hen lays eggs as big as ballists!"—Detroit Free Press.

She—What a little mouth your young lady friend has! It doesn't look large enough to hold her tongue. He—It doesn't.—Yonkers Statesman.

Mrs. Newed—Was I nervous, dear, during the ceremony? Miss Spitzig—Well, a trifle, at first, darling, but not after William had said yes.—Truth.

Mrs. Ton—You used to say I was the light of your life. Mr. Ton—Yes, and I suppose that's why you are so easily put out now we are married.—Judy.

A ray of hope: The Bride—I'm so worried about Fred's cold! Her Mother—Still, the majority of cases of cold in the head terminate favorably.—Puck.

Barnes Torner—Talk about your frosts! Why, a boy came down from the gallery and wanted his money back because he was afraid to stay alone.—Life.

She—It must have taken a great deal of persistence on your part to learn to play the violin so well. He—It did. I had to go constantly armed for five years.—Life.

"But we cannot live on papa," protested the savage's bride to be; "he is dreadfully poor." "We can wait until he is fatter!" said the cannibal.—Detroit Journal.

An old woman quite repellent comes in. "Do you think you can find a husband for me?" she asks. Agent—Perhaps—if some blind man comes in.—L'Illustrate de Poche.

"Did you divide your bonbons with your little brother, Mollie?" "Yes, ma; I ate the candy and gave him the notes. You know he is awfully fond of reading."—Pick-Me-Up.

"You poor schoolma'am are woefully underpaid." "Oh, I don't know. I have taken enough chewing-gum away from the children to last me three years."—Indianapolis Journal.

"Ah, my poor man," said the benevolent old lady, "I suppose you are often pinched by want and hunger, are you not?" "Yessum, and by de cops."—Cincinnati Commercial-Tribune.

"And are the divorce laws so very liberal in your section?" "Liberal? Say! They are so liberal that nobody ever heard of a woman crying at a wedding out there."—Detroit Journal.

He—Miss Bellecour claims to belong to a very old family. She—Well, she's justified. There are six of those girls, and the youngest of them must be at least 35.—Cleveland Leader.

"Mrs. Chink has hit on a plan to keep her husband from smoking in the parlor." "What did she do?" "She hung the portraits of her three former husbands there."—Chicago Record.

Bachelor—Do you think a man will have had luck if he gets married on Friday? Benedict—Oh, I don't think it makes any difference whether it's Friday or not.—Yonkers Statesman.

"Truth crushed to earth will rise again," quoted the earnest man. "True," replied Senator Sorghum; "but in many cases, not until after the referee has counted ten."—Washington Star.

She—Tell me, dearest, do you really tell me all your thoughts? He—Certainly, my darling; more than that, even. Every day I tell you hundreds of things without even thinking.—Answers.

The Farmer's Wife—Would you be willing to saw some wood for your breakfast? Fluent Fontleroy—It would be useless, madam. My teeth are not as good as they once were.—Cornell Widow.

"So you think with the bishop that the crowd at Carson was not composed of average Americans?" "Of course I do. The average man was too hard up to go."—Cincinnati Commercial-Tribune.

"It is very hard to learn to ride a bicycle!" asked the pretty girl of her cousin Will, who had taken three lessons. "Well," said Will, ruefully, "when you hit the ground it is."—Washington Times.

Jinks (at a party)—I don't see what's the matter with that pretty woman over there. She was awfully flirty with a while ago and now she won't have anything to do with me. Stranger—I have just come in. She's my wife.—Scottish Nights.

"Then why did you encourage me?" he demanded, fiercely. Tears sprang to her eyes. "Pray, forgive me," she entreated. "I know I got mad when you asked me to be your wife, and told you never to speak to me again, but I am sorry. I do not love you now. I don't believe I loved you even then. I was thoughtless. Can you not forgive me? May we not part friends?"—Detroit Journal.

Boston Teacher—We will now take up the study of the senses. Why has the Creator furnished us with eyes? Boston Pupil (aged 4)—To enable us to see. Teacher—And what office is filled by the nose? Pupil—It was given to man so that he might smell and thus guard against the inhalation of unhealthy odors. Teacher—Why are we favored with ears? Pupil—To hold our spectacles in place.—Cleveland Leader.

A SCIENTIST SAVED.

President Barnaby, of Hartsville College, Survives a Serious Illness Through the Aid of Dr. Williams' Pink Pills for Pale People.

From the Republican, Columbus, Ind. The Hartsville College, situated at Hartsville, Indiana, was founded years ago in the interest of the United Brethren Church, when the state was mostly a wilderness, and colleges were scarce. The college is well known throughout the country, former students having gone into all parts of the world.



PROF. ALVIN F. BARNABY.

A reporter recently called at this famous seat of learning and was shown into the room of the president, Prof. Alvin F. Barnaby. When last seen by the reporter Prof. Barnaby was in delicate health. Today he was apparently in the best of health. In response to an inquiry the professor said:

"Oh, yes, I am much better than for some time. I am now in perfect health; but my recovery was brought about in rather a peculiar way."

"Tell me about it," said the reporter. "Well, to begin at the beginning," said the professor, "I studied too hard when at school, endeavoring to educate myself for the professions. After completing the common course I came here, and graduated from the theological course. I entered the ministry, and accepted the charge of a United Brethren Church at a small place in Kent county, Mich. Being of an ambitious nature, I applied myself diligently to

my work and studies. In time I noticed that my health was failing. My trouble was indigestion, and this with other troubles brought on nervousness. "My physician prescribed for me for some time, and advised me to take a change of climate. I did as he requested and was some improved. Soon after, I came here as professor in physics and chemistry, and later was financial agent of this college. The change agreed with me, and for awhile my health was better, but my duties were heavy, and again I found my trouble returning. This time it was more severe and in the winter I became completely prostrated. I tried various medicines and different physicians. Finally, I was able to return to my duties. Last spring I was elected president of the college. Again I had considerable work, and the trouble, which had not been entirely cured, began to affect me, and last fall I collapsed. I had different doctors, but none did me any good. Professor Bowman, who is professor of natural science, told me of his experience with Dr. Williams' Pink Pills for Pale People and urged me to give them a trial, because they had benefited him in a similar case, and I concluded to try them.

"The first box helped me, and the second gave great relief, such as I had never experienced from the treatment of any physician. After using six boxes of the medicine I was entirely cured. Today I am perfectly well. I feel better and stronger than for years. I certainly recommend this medicine."

To allay all doubt Prof. Barnaby cheerfully made an affidavit before

Notary Public.

Dr. Williams' Pink Pills for Pale People are sold by all dealers, or will be sent postpaid on receipt of price, 50 cents a box, or six boxes for \$2.50 (they are never sold in bulk, or by the 100), by addressing Dr. Williams' Medicine Co., Schenectady, N. Y.

REASONS FOR USING Walter Baker & Co.'s Breakfast Cocoa.



1. Because it is absolutely pure.

2. Because it is not made by the so-called Dutch Process in which chemicals are used.

3. Because beans of the finest quality are used.

4. Because it is made by a method which preserves unimpaired the exquisite natural flavor and odor of the beans.

5. Because it is the most economical, costing less than one cent a cup.

Be sure that you get the genuine article made by WALTER BAKER & CO. LTD., Dorchester, Mass. Established 1780.

Good Health

Are you nervous? Your nerves are the channels through which your general vitality courses. If they are upset you can't be healthy. There are innumerable ailments following nervousness.

Dr. Sanden's Electric Belt..

Cures all of them. The life of the nerves is Electricity, which this famous appliance pours into your body for hours at a time. Its effect is soothing, strengthening, exhilarating. Read Dr. Sanden's famous book, "THREE CLASSES OF MEN." It is instructive to weak men or women. It gives hundreds of cases of cures accomplished in the Northwest. If you will send us your address we will mail you a copy by return mail FREE, closely sealed.

SANDEN ELECTRIC BELT CO., 253 West Washington St., Portland, Or.

When writing to Advertiser please mention this paper.

A Bit of Original Spelling.

The Boy, as has been said, was born without the sense of spell. The Rule of Three, it puzzled him, and fractions were as bad; and the proper placing of e and i, or i and e, the doubling of letters in the middle of words, and how to treat the addition of a suffix in "y" or "ion" ("always drove him mad," from his childhood on. He hated to go to school, but he loved to play school; and when Johnny RODERUSA and he were not conducting a pompous public funeral—a certain oblong hat-brush, with a rosewood back, studded with brass tacks, serving as a coffin, in which lay the body of Henry Clay, Daniel Webster, or the Duke of Wellington, all of whom died when Johnny and The Boy were about 8 years old—they were teaching each other the three immortal and exceedingly trying "R's"—reading, 'riting, and 'rithmetic—in a play school. Their favorite spelling-book was a certain old cook book discarded by the head of the kitchen, and considered all that was necessary for their educational purpose. From this, one afternoon, Johnnie gave out "doughnut," with the following surprising result. Conscious of the puzzling presence of certain silent consonants and vowels, The Boy thus set it down: "D-O, dough, N-O-U-G-H-T, nut—doughnut," and he went up head in a class of one, neither teacher nor pupil perceiving the funny blunder The Boy had made.—St. Nicholas.

VIGOR OF MEN

Easily, Quickly, Permanently Restored Weakness, Nervousness, Debility, and all the train of evils from early errors or later excesses; the result of overwork, sickness, worry, etc. Full strength, development and tone given to every organ and portion of the body. Simple, natural methods. Immediate improvement seen. Failure impossible. 200 references. Book, explanation and proofs mailed (sealed) free.

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Make money by successful speculation in Chicago. We buy and sell wheat there on margin. Fortunes have been made on a small beginning by trading in futures. Write for full particulars. Best of reference given. Several years' experience on the Chicago Board of Trade, and a thorough knowledge of the business. Downing, Hopkins & Co., Chicago Board of Trade Brokers. Offices in Portland, Oregon, Spokane and Seattle, Wash.

OREGON BLOOD PURIFIER

Gives Vigor, Health, Life and Strength. Easy to take and effective. Used and sold everywhere. If your druggist or merchant has not in stock the genuine remedy, which has and will cure 99 per cent, address Prusker's Oregon Blood Purifier, Portland, Or., by sending \$1 for a bottle or \$5 for a half dozen bottles and we will prepay express.

PUPTURE and PILES cured; no pay unless cured; send for book. Drs. M. W. Prusker & Porterfield, 335 Market St., San Francisco.

WHEAT CURE FOR RHEUMATISM, GOUT, BRUISES, SWELLINGS, CONSUMPTION. N.P.N.U. No. 702.—S.F.N.U. No. 779