

## Good Blood

Means good health, and Hood's Sarsaparilla has an unapproached record as a blood-purifier.

It effects its wonderful cures, not simply because it contains sarsaparilla but because it combines the utmost remedial values of more than 20 different ingredients. There is no real substitute for it. If urged to buy any preparation said to be "just as good" you may be sure it is inferior, costs less to make, and yields the dealer a larger profit. Get Hood's Sarsaparilla today. In usual liquid form or in chocolate tablets known as Sarasatabs.

**TYPEWRITERS.** "New Visible Type." All makes rebuilt like new, at second-hand prices. Two Smith-Dens-R mfg. from \$25 to \$45. Supplies for all makes. Machines rented, \$2 to \$3.50 monthly. The Typewriter Exchange, 253 Montgomery, San Francisco.

Potatoes steeped in sulphuric acid and subjected to pressure make an excellent substitute for ivory in the manufacture of billiard balls.

**DO YOU WANT A TYPEWRITER?** The Wholesale Typewriter Co., 57 Montgomery St., San Francisco, will sell you one at 40 to 75 per cent discount from factory list, all makes on market, all fully guaranteed.

English mercantile marine, which farms more than one-half of the whole world's shipping, brings that country about \$450,000,000 every year.

Mothers will find Mrs. Winslow's Soothing Syrup the best remedy to use for their children during the teething period.

**FITS** St. Vitus' Dance and nervous diseases permanently cured by Dr. J. C. King's Great Nerve Restorer. Send for FREE \$2.00 trial bottle and treatise. Dr. E. H. King, Ltd., 311 Arch St., Philadelphia, Pa.

The ruby is the most valuable of the precious stones. A four-karat ruby is quoted at about \$2,250, and a ruby of forty-seven karats brought \$100,000.

## Overcomes Loss of Nervous Force in Men and Women

Men and women who are nervous wrecks, who lack energy and ambition, who suffer with nervousness, dread, anxiety and a general inability to be happy or to act naturally and rationally at all times, may try this treatment with a certainty of astonishing results.

The ingredients can be obtained separately at all well stocked drug stores. At any leading drug store get three ounces syrup sarsaparilla compound in a half-pint bottle. Get one ounce each of the following in separate packages: Compound fluid balmain, compound essence cardiac, and tincture cademes compound (not carlamon). Add balmain to sarsaparilla, let stand two hours, then add other two, shake well and take a teaspoonful after each meal and one at retiring.

Of the timber England imports, 87 per cent is pine and fir, 3 per cent oak and 14 per cent teak, mahogany and other furniture woods.

## Syrup of Figs and Elixir of Senna

acts gently yet promptly on the bowels; cleanses the system effectually; assists one in overcoming habitual constipation permanently.

To get its beneficial effects always buy the genuine.

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James McGune, 108 Mercer St., Jersey City, N. J. Pleasant, Palatable, Potent, Taste Good. Do Good. Never Sicken, Weaken or Gripes. 10c, 25c, 50c. Never sold in bulk. The genuine tablet stamped C. C. C. Guaranteed to cure or your money back.

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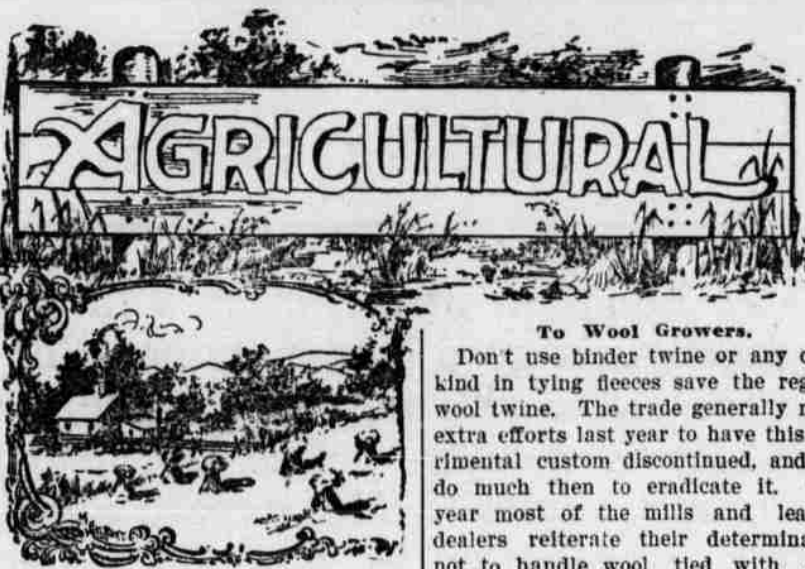
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## GOLDEN WEST

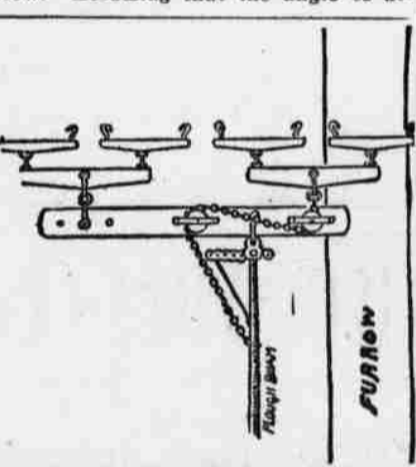
COFFEE, TEA, SPICES, BAKING POWDER, EXTRACTS, JUST RIGHT, CLOSET & DEWEYS, PORTLAND, ORE.



### Four-Horse Ewener.

This particular form of four-horse ewener is entered to work with one horse in the furrow and the other three on the land. To get an even draft will perhaps require some adjustment of the left hand double tree and the proper place to attach the chain to the plow beam can be found by experiment. The two double trees are of the ordinary length and the stick used for ewener needs to be tough oak and five feet four inches in length. The two pulleys should be large enough to allow a small link log chain to work through them. Two bolts are required for the pulleys, and two pieces of strap iron two inches wide, used as braces. The illustration does not indicate exactly the distances between the different points which should be as follows: From the right end to the first pulley, 7 inches; from the point of attachment of the plow to the center of right hand pulley, 15 1/2 inches; from the point of attachment of the plow to the center of the left hand pulley 8 1/2 inches. This places the two pulleys almost 24 inches apart. At the left end have three or more holes into which the double tree for left hand team can be hitched.

For an even distribution of the draft the proper point of attachment of the left hand double tree will depend solely upon the point of attachment of the chain to the plow. If the chain is carried far back, its draft will be different from what it would be if it were attached closer to the nose end of the plow. Assuming that the angle of at-



tachment of the chain to the plow is 30 degrees the left hand double tree should be attached to the main piece of the ewener at a point about 20 1/2 inches from the point of attachment of the plow to the double tree. There is no reason why this ewener should not work on any kind of plow provided that the lengths of the parts are adjusted to suit the distance of the point of attachment of the main tree from the furrow and that there is a rigid brace to which to attach the chain.

### Treatment for Potato Scab.

It is true that as early as 1842 a German investigator suggested that the trouble was caused by a parasitic organism, but later it was definitely determined that the fungus, *Sorosporium scabiei*, which he had isolated, was not invariably the cause of the trouble. It was not until 1890 that Prof. Bolley definitely determined that potato scab was caused by a fungus parasite. Until resistant strains could be bred up it was necessary that some temporary preventive be applied, says Farm, Stock and Home. Treatment of scabies may be made by the use of formalin or corrosive sublimate (bichloride of mercury). The latter is perhaps the most effective, but it should be handled with the greatest caution, as it is a very powerful poison when taken internally. The solution is prepared by dissolving two ounces of corrosive sublimate in two gallons of hot water. When the poison is well dissolved, add twelve gallons of water, making fourteen gallons in all. The potatoes, which should be reasonably clean, should be put in a gunny sack and the whole suspended in the solution for an hour and a half. Then empty them out on a floor to dry thoroughly before cutting and planting.

### Wash for Nursery Stock.

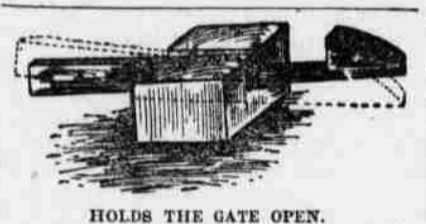
Dipping nursery stock in lime-sulphur wash or other insecticides has recently been much advocated as a substitute for fumigation with hydrocyanic acid gas. The station at Geneva, N. Y., finds, however, that this treatment, if used at all, must be handled with care to secure scale destruction without injuring the trees. With the sulphur wash, exposure of the trees for too long a time or at too high temperature resulted in injury; while with any of the materials used, exposure of the roots to the mixture resulted in serious injury to the stock. For nurserymen the station still recommends fumigation as most effective and least liable to injury, and would advise orchardists to use the lime-sulphur as a spray after the trees are set, rather than as a dip when they are received.—Farm Journal.

### To Wool Growers.

Don't use binder twine or any other kind in tying fleeces save the regular wool twine. The trade generally made extra efforts last year to have this detrimental custom discontinued, and did do much then to eradicate it. This year most of the mills and leading dealers reiterate their determination not to handle wool tied with sisal twine, as it renders the wool unfit for dyeing; hence, if growers or those preparing wool for market expect to find ready sale and top prices for their wools, they must adhere to this advice. Higher prices and active competition for the receipts, if properly and carefully handled, is confidently anticipated in this market the coming season, and shippers are also advised that in order to realize the best results consignments should be sold here on the open market, where all buyers can compete for them.

### To Hold the Gate Open.

A piece of timber 4x6 two feet long, with a notch in one end 3x6 inches, a piece 2x4 two feet long with one end beveled and a notch 2 1/2 x 6 inches cut in position as shown in sketch serves



to hold the gate open. The dotted lines show the position of the holder as the gate is forced over the level. The post should be set to correspond with the height of the gate when open. If the gate drags on the ground there is something wrong; hang the gate a little bit higher. The end opposite the notch of the holder should be the heaviest so as to keep the notch in position on the gate.

### Concerning Hogs.

A hog is a hog frequently because he is given no opportunity to be cleanly and decent. There are farmers who believe a hog would die if not allowed to wallow in mud and filth, while others are of the opinion that the hog should have plenty of clean water. The hog needs a great deal of water in hot weather, and if he cannot get it he will take mud as the next best thing. A hog rushes to a mudhole to cool off. He comes out and the mud dries on his skin. The next mud bath he takes adds another layer to that already dried on, and in a short time the pores of his skin are completely clogged with mud. Now, a hog cannot thrive with his pores all clogged up any better than a man. If a hog has access to a deep pool of water, as he should in hot weather, he will keep clean and thrive much more than if he lies around in a mudhole made filthy by continued use. Most farmers who supply a bathing place for their hogs make them so shallow that they are soon converted into mudholes. On our farm we usually keep from thirty to fifty pigs, and they have a pool of water fed by a stream, and it is deep enough for them to swim in. The sides are dug down sharply, and were laid with cobblestones for a distance of four or five feet from the water's edge. The pool was always clean; we never have trouble with mange or lice, and when on two occasions cholera swept through the country our hogs were not affected. The hogs never used the pool unless the weather was extremely hot.

### A Smooth Field.

It worries the good farmer to see his neighbors plowing the fields round and round the same way year after year. He knows that by-and-by there will be deep furrows all over the farm, and all the while these might be avoided. How? Change the order of things this spring by going out into the center of the field where the dead furrow is and turning it full the first thing. Then go around instead of haw, as is usually done, plowing back to the place of beginning. Keep this up to the end and you will have no ditch in the middle, but a field that is nice and smooth and good to look upon. It may be a little awkward turning round to the right where one has always been in the habit of turning to the left, but you will soon get accustomed to it, and so will the horses.

### Champion Holstein Bull.



**Applying Lime to the Soil.** As a rule all compact clay soils may be greatly benefited by the application of one ton of lime per acre, just after breaking up, either in fall or spring, and thoroughly mixed with the earth. Lime should not be applied with manure of any kind, but the latter (manure) may be applied as a top dressing and worked in by cultivation of the crop. One application of lime every five years is usually sufficient.

## Save the Babies.

INFANT MORTALITY is something frightful. We can hardly realize that of all the children born in civilized countries, twenty-two per cent, or nearly one-quarter, die before they reach one year; thirty-seven per cent., or more than one-third, before they are five, and one-half before they are fifteen!

We do not hesitate to say that a timely use of Castoria would save a majority of these precious lives. Neither do we hesitate to say that many of these infantile deaths are occasioned by the use of narcotic preparations. Drops, tinctures and soothing syrups sold for children's complaints contain more or less opium, or morphine. They are, in considerable quantities, deadly poisons. In any quantity they stupefy, retard circulation and lead to congestions, sickness, death. Castoria operates exactly the reverse, but you must see that it bears the signature of Chas. H. Fletcher. Castoria causes the blood to circulate properly, opens the pores of the skin and allays fever.

## Letters from Prominent Physicians addressed to Chas. H. Fletcher.

Dr. A. F. Peeler, of St. Louis, Mo., says: "I have prescribed your Castoria in many cases and have always found it an efficient and speedy remedy."

Dr. E. Down, of Philadelphia, Pa., says: "I have prescribed your Castoria in my practice for many years with great satisfaction to myself and benefit to my patients."

Dr. Edward Parrish, of Brooklyn, N. Y., says: "I have used your Castoria in my own household with good results, and have advised several patients to use it for its mild laxative effect and freedom from harm."

Dr. J. B. Elliott, of New York City, says: "Having during the past six years prescribed your Castoria for infantile stomach disorders, I most heartily commend its use. The formula contains nothing deleterious to the most delicate of children."

Dr. C. G. Sprague, of Omaha, Neb., says: "Your Castoria is an ideal medicine for children, and I frequently prescribe it. While I do not advocate the indiscriminate use of proprietary medicines, yet Castoria is an exception for conditions which arise in the care of children."

Dr. J. A. Parker, of Kansas City, Mo., says: "Your Castoria holds the esteem of the medical profession in a manner held by no other proprietary preparation. It is a sure and reliable medicine for infants and children. In fact, it is the universal household remedy for infantile ailments."

Dr. H. F. Merrill, of Augusta, Me., says: "Castoria is one of the very finest and most remarkable remedies for infants and children. In my opinion your Castoria has saved thousands from an early grave. I can furnish hundreds of testimonials from this locality as to its efficiency and merits."

Dr. Norman M. Geer, of Cleveland, Ohio, says: "During the last twelve years I have frequently recommended your Castoria as one of the best preparations of the kind, being safe in the hands of parents and very effective in relieving children's disorders, while the ease with which such a pleasant preparation can be administered is a great advantage."

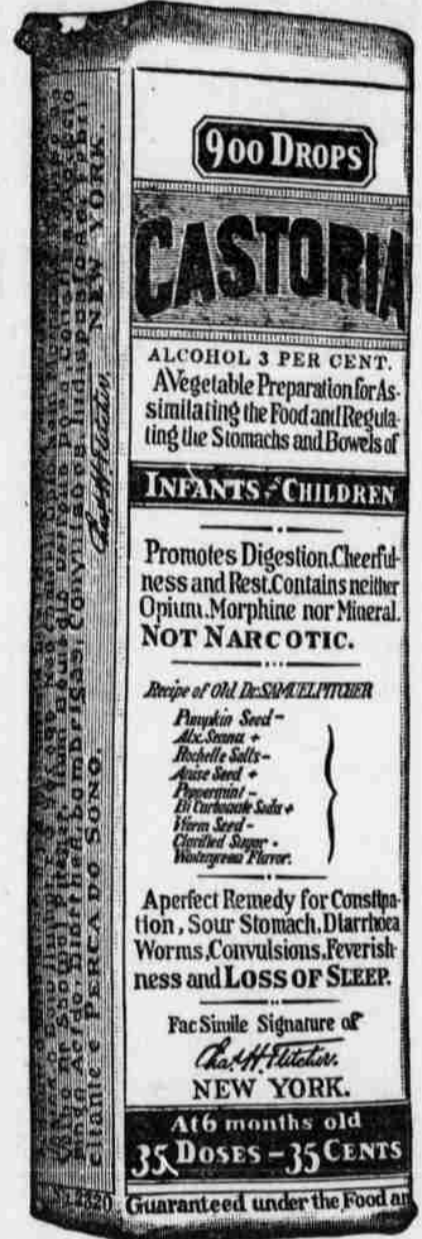
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## UNSANITARY CONDITIONS.

Water Supply in Many Cases Found Unnecessarily Polluted. E. F. Fernot, Oregon Agricultural College, Corvallis.

The condition in which I find water received from various parts of the state warrants my calling the attention of the public to the unsanitary conditions which must exist surrounding their water supply. Some samples of water taken in sterile bottles under aseptic precautions, contain as high as 63,580 germs per cubic centimeter (a teaspoon holds about five cubic centimeters of water and an ordinary drinking glass about 225 cubic centimeters). A glass full of such water would therefore contain 14,305,500 living germs. While it is true that many varieties of these germs are not directly disease producing, the continued introduction of such large quantities of them into the system lowers vitality and increases susceptibility to the disease producing types when they gain access to the body. Water containing so many organisms carries also, in solution, the ptomaines from the putrefaction of the organic matter in which they grew. These large number of organisms generally find their way into open wells by surface drainage and where they can pass, so may the disease producing types pass also.

The waters from driven wells are comparatively free from organisms. An open well is an abomination and is not in keeping with our present understanding of the laws of sanitation. The question arises, how can we better our condition. Where a well is the only means of obtaining water, let it be dug to the water bearing stratum, wall it up with brick laid in cement for ten feet, arch it over with the pump pipe and arch well cemented in, fill the remainder of the hole, which may be 15 to 20 feet, with clay well tramped down and the result will be a bottomless brick jug, deep under ground, into which no surface water, worms nor animals can penetrate. The water from such a well is as pure as can be obtained from the locality in which it is situated.

There are many families living in the country who should enjoy the best of health, but who are always ailing. The cause of ill health may, as a rule, be traced to their use of polluted water produced by the unsanitary condition of their surroundings. But few homes have proper drainage from sinks and baths, dish water is thrown out of the back door on the ground near the well, garbage is similarly disposed of to decompose and drain into the well. Wash water containing filth that would not be tolerated on the clothing is also emptied on the ground to drain into the well. Most of the open wells situated near the house or barn are but

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cesspools. It is the lowest point in its vicinity into which liquid drains. Frequently a privy is located within a stone's throw of an open well. When the water table rises to the surface of the ground, as it always does during the winter in Western Oregon, all surface water is contaminated, and, as the water level lowers, the open wells become reservoirs for the drainage.

The ordinary stone or brick wall of an open well only serves the purpose of preventing the caving in of the earth and in no sense acts as a filter. We have received samples of water from open wells, situated near barnyards or dwellings, which were loaded with organisms that are instrumental in decomposing manure. The samples gave strong reactions of ammonia by chemical analysis and were even tinted with the color of liquid manure. One particular sample was thus polluted from a flower bed near the house, the flower bed having been heavily manured.

In localities where water is piped into the house and there is no sewer, the toilets should be connected with a properly constructed septic tank and the effluent should be piped a long distance from the well and empty on the surface of the ground, where sun and air may still further purify it. If an open closet must be used, a concrete vault, well cemented, should be constructed, instead of a mere hole in the ground, and lime frequently thrown into it to prevent the breeding of flies. Earth closets have been very successful and consist of galvanized iron trays or tubs that may be emptied away from the premises; dry earth or ashes should be used in connection with them to absorb moisture and suppress odor.

It is well known that flies breed in human and animal manure; for example, the deposits of human excreta are often seen to be a crawling mass of maggots, these are the larvae hatched from the eggs deposited by flies, from this they pass into the pupa stage and again emerge as flies with the return of warm weather. These flies enter our dwellings, walk upon our food and directly transmit the organisms from excreta to our food. Contamination does not cease at that, for we have definitely proven that the organisms which the flies take into their bodies from the excreta are not destroyed by their digestion, and passing from their bodies with the excreta the germs utilize this excreta for food and multiply. Therefore a fly speck containing fifty germs will increase its numbers fifty-fold.

If perchance the organism happens to be the typhoid bacillus, a fly speck upon an apple, or other food, will eventually contain thousands of germs. This we have conclusively demonstrated by hatching flies in a sterile box, then feeding them with bread or sugar saturated with cultures of the typhoid bacilli, then allowing them to excrete upon apples, cabbage leaves, other material that gives off moisture. The fly speck, after some time, assumes the form of a colony and is found to be loaded with living typhoid bacilli, showing that they had passed through the fly unharmed and had multiplied abundantly in the fly's deposit. It is well known that milk is an ideal food for typhoid bacilli, and for that reason should be well guarded from the invasion of flies. Keep flies out of the house, especially that part where food is kept.

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