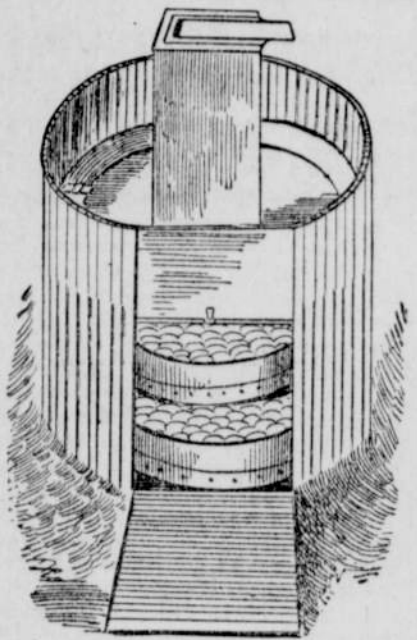




Simple Incubator.

Some years ago hearing a piping of chicks on the side of a manure heap in the barn yard, I searched and found a nest of self-hatched live and hearty orphans left on the cold world without a mother. And if any living creature knows best how hard a thing it is to be without a mother, it is a new born chick. The chicks were saved, however, by simply leaving them where they were found and feeding them in a coop fitted to the manure heap, by which the warmth that had brought them safely into this cold world, safely nourished them until they were able to take care of themselves, which they did in a short time.

The natural warmth of fermenting manure was used to hatch chicks by

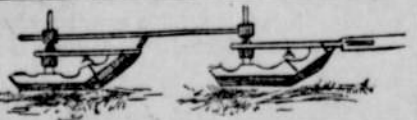


HOME-MADE INCUBATOR.

Reaumur, that noted French scientist who invented the thermometer known by his name. It is, and has been for 2,000 years, in use by Egyptians for hatching eggs artificially. Mons. Reaumur invented a neat box in which the manure might be placed, and under a nest kept covered by a piece of sheep-skin or a bunch of soft hay, to retain the heat of the manure which seems to be naturally that needed to hatch chickens. Now this old self-regulating apparatus may be set a-going by any farmer's boy, who is not averse to the healthful, if disagreeable odor of a manure heap. The apparatus used for this purpose is quite simple. A small barrel, or a box, may serve the purpose; the manure being heaped and covered with straw as a shelter for the nest. A regulator by which air is given is made in the shape of a pipe or spout having a thermometer hung inside of it to note the temperature. This device is far more certain than an incubator, heated by a lamp or by boiling water, for while the manure may cool down a little it will never get too hot, and so cook the chickens before their due time. Certainly there is a field for the farmer's boys to try their skill and luck as we may say, and rear some chicks without the help or rather worry of the willful cross-grained and generally unsatisfactory hen, which will as soon as not beat a little chick to death if it stray within her own special brood. H. S.

Pair of Bobsleds.

The figure represents a home-made pair of bobsleds, or flat bottom mud bobs, that will take the place of the old, long mud sled. The runners are made of plank 3 feet 6 inches long by 4 inches wide and 1 1/2 inches thick, bolted together with two three-eighths inch bolts. The dark lines in cut (A) are pieces of 2 by 4 inch stuff, set up edge-ways and hollowed out as shown. The raves are made of 1 1/2 inch thick stuff, 4 inches wide. Beams are 3 by 4 inches square; bolsters the same. The blocks



HOME-MADE BOBSLEDS.

under beam are 3 by 4 inches, cut off square and bolted up through runner and rave with two half-inch bolts. This makes a very strong pair of bobs, that are just the thing to use in the sugar bush and around on the farm in the spring of the year.

Bermuda Grass.

There is not a great deal of difficulty in getting rid of Bermuda in a sandy soil, but in upland red clay there is more difficulty. Plow the sod shallow, an harrow and rake out all the grass. Then sow the land thickly in peas, using fully one and a half bushels per acre. Fertilize the peas with acid phosphate and potash to get as heavy a growth as possible, and use the Wonder soil, as it grows ranker than any other pea. Mow the peas for hay as soon as well podded, and plow the land at once and harrow and prepare it for oats to be sown in September. Sow red clover with the oats and use plenty of seed, not less than 15 pounds per acre. The following spring after the oats crop plow the clover down and plant in corn or cotton and work clean.

If any grass then remains renew the oats after the crop is off. If planted in cotton this would necessitate the sowing of the oats in late winter. Follow this oats crop with peas again and you will have no more Bermuda, and will find the land vastly improved and be well paid for the work done to clear the land. Constant succession of smothering crops of peas, oats and clover will drive it out.—Practical Farmer.

Cucumbers.
To grow cucumbers successfully thorough manuring and cultivating are necessary. In the early spring the growers of cucumbers for the market use immense quantities of manure to force the growth. The seed should be sown in moist ground, not in the dry soil just at top of the hill. The moist soil will assist the germination. The more common way is to make large hills and put a good lot of manure in the bottom, even if the whole ground has been previously worked over with manure. The manure in the hill should be deep enough and there should be enough dirt above it to prevent the tender roots coming into contact with it. To keep off the bugs till the plants are large enough to take care of themselves is always somewhat of a problem. There are various remedies given. But one of the most satisfactory methods is to have some light muslin cloth with which to cover the hills till the plants get a number of coarse leaves. These cloths are stretched over a frame and the ends covered with the soil. Most of the insects feed on the tender leaves and are not particularly interested in the coarser leaves that come later.—Farmers' Review.

Burr Knapp's Farm Furrows.
One of the greatest faults is fault finding. The milking stool is a poor curry comb. He who eats more than he produces robs the world. Some men who pet their neighbor's children will only pound their own. No grnd, no grist. Failure sighs while success hustles. An old field may produce new grain. Lazy bees, no honey; lazy farmer, no money. Who refuses to toil has no right to the soil. Every shine has its shadows and even a shadow has its use. If you do not want it, the greatest of bargains is not cheap.—Exchange.

The Suffolk Sheep.
This beautiful sheep is a fair representative of another descendant of the Southdown breed to which it owes all those peculiarities, except size, that have been given to every cross bred race of sheep in which the Southdown blood flows. It more closely resembles its half parent than the Shropshire does, having a smoother body, a finer fleece, and more of the broad loin than this possesses. It is a new breed, having only been admitted to the English exhibitions as a distinct class ten years ago, although its foundation began by the first cross of the Southdown on an ancient race, a hardy, horned, black-faced sheep existing from time immemorial in the County of Suffolk, in England. This sheep is a special mutant breed. Its fleece, however, being valued highly for the manufacture of



THE SUFFOLK SHEEP.

clothing. It is doubtful if the breed has been sufficiently long established to confer on it the ability to maintain itself, as the Southdown or Shropshire does in all its special points. Time is required for this, but the Suffolk has its usefulness in crossing an inferior sheep to improve them in all the desired points for the butcher and for its fleece.

Judging Sheep.
It requires familiarity with sheep to enable one to judge beneath its coat of wool whether it is fat or in poor condition. An experienced shepherd will not only know the various sheep in his flock by differences in their faces, but he can also tell by the looks of the sheep what age it is, and whether it is in thrifty or unthrifty condition. Yet to most people a flock of sheep presents no individual peculiarities.

Fertilizing Strawberries.
Strawberry roots do not spread out near the surface of the ground as much as some other kinds of small fruits, for which reason all fertilizers applied should be along the rows, close to the plants. It is an excellent plan to apply fertilizer over the rows early in spring, but at this season of the year it cannot be done without injury to plants.

Good Horses in Demand.
Good horses are in demand, not only for army use, but on farms. A few years ago horses fell in price to a point which made it unprofitable to raise them, but since that time they have become scarce in some sections. There may be an abundant supply of "plugs," but horses adapted for general work on the farms will find ready sale.

Asparagus.
Those who grow asparagus by level culture object to the work of cutting the shoots. The proper way is to till up the rows thirty inches high, so as not to be compelled to bend the body low in cutting. If the shoots are cut just as the tips are appearing through the ground, they will be tender from the ends to the butts.

Victorious

America's Greatest Medicine Conquer Disease and Suffering.

Impure blood is the foe of mankind, the cause and promoter of scrofula, salt rheum, boils, sores, pimples and eruptions, catarrh, rheumatism, dyspepsia, malaria, and that tired feeling. Hood's Sarsaparilla overcomes these diseases by making the blood rich and pure.

Hood's Sarsaparilla
Is America's Greatest Medicine. \$1; six for \$5.
Hood's Pills cure indigestion. 25 cents.

The whale's nose is on the top of the head, at least his nostrils are situated there, through which he expels the columns of water known as "spouting." Whales only spout when they are feeding.

Calcium carbide finds a new application in the treatment of the black rot of grapes. M. G. Rodier having discovered that sprinkling the green grapes with this substance is effective.

TRY ALLEN'S FOOT-EASE.
A powder to be shaken into the shoes. At this season your feet feel swollen, nervous, and hot, and get tired easily. If you have smarting feet or tight shoes, try Allen's Foot-Ease. It cools the feet and makes walking easy. Cures swollen and sweating feet, blisters and callous spots. Relieves corns and bunions of all pain and gives rest and comfort. Ten thousand testimonials of cures. Try it today. Sold by all druggists and shoe stores for 25c. Sent by mail for 25c in stamps. Trial package FREE. Address Allen S. Olmsted, Le Roy, N. Y.

The most ancient coin in Europe, the denia, was first struck in the mint of Venice in the year 1284. The building is still in existence.

WAGONS IMPROVED.
The new improved Stoughton wagons stand the racket. Three more car loads are on the way. It pays to have the best. Write for free catalogue. JOHN POOLE, sole agent, foot of Morrison street, Portland, Or.

Not within living memory has there been known so abnormally snowless a winter in European Russia as the past winter.

Dr. T. H. White, No. 271 1/2 Morrison street, cor. Fourth, Portland, Or., is the only representative in the Pacific Northwest of the patented system of Crown and Bridge Work, invented by Dr. L. L. White, of San Francisco. By this method you do not have teeth extracted because they are decayed to the gums, in order to have new teeth inserted. Instead you can have crowns put on old roots, restoring the same to natural conditions and artificial teeth inserted where they have been removed. These operations are performed quickly and painlessly. Dr. White, by the use of electricity and other methods, fills and extracts teeth without pain.

Optim eating has become a habit with the Kafirs in South Africa. The Chinese are the chief purveyors of the drug.

FITS Permanently Cured. No fit or nervousness after first day's use of Dr. Kline's Great Nerve Restorer. Send for FREE \$2.00 trial bottle and treatise. DR. R. H. KLINE, M.D., 930 Arch street, Philadelphia, Pa.

Cobetz di Vaca explored the Gila river country in 1535, and reported that the natives were dressed in cotton garments.

Piso's Cure for Consumption is the only cough medicine used in my house.—D. C. Albright, Millburg, Pa., Dec. 11, 1895.

The highest waterfall in the world is Cholock cascade, at Yosemite, Cal., which is 2,635 feet high, or just half a mile.

Try Schilling's Best tea and baking powder.

Beware of Ointments for Catarrh That Contain Mercury.

As mercury will surely destroy the sense of smell and completely derange the whole system when entering it through the mucous surfaces. Such articles should never be used except on prescriptions from reputable physicians, as the damage they will do is ten fold to the good you can possibly derive from them. Hall's Catarrh Cure, manufactured by F. J. Cheney & Co., Toledo, O., contains no mercury, and is taken internally, acting directly upon the blood and mucous surfaces of the system. In buying Hall's Catarrh Cure be sure you get the genuine. It is taken internally, and made in Toledo, Ohio, by F. J. Cheney & Co. Testimonials free. Sold by Druggists, price 75c per bottle. Hall's Family Pills are the best.

The two biggest fire engines in the world are in Liverpool; they can throw 1,800 gallons of water a minute and a jet 180 feet high.

Longest Trolley Ride.
The longest electric railway in the world is said to be that operated between Kenosha and Waukesha Beach, both in Wisconsin. This line is 62 miles long, and arrangements have been made by the Milwaukee Electric Railway and Light Company to run chartered cars from Milwaukee to Waukesha Beach. Commutation tickets, sold at a lower rate than the regular steam roads, and other inducements are expected to bring a heavy traffic.

Burglars, by boring a large hole in a door of the courthouse at Ipendahl, Natal, gained admittance, smashed open the safe and carried off 700 pounds sterling of native hut-tax money just collected.—Natal Mercury.

THE CLIMATE OF CUBA.
Because of frequent rains in Cuba malarial fevers are a common ailment there, just as they are in many sections of the United States. Ailments of this kind, no matter in what part of the globe they occur, are quickly cured with Hostetter's Stomach Bitters. Besides being a specific for malarial troubles, these Bitters also make pure blood, strengthen nerves and muscles and firm, healthy flesh. They have no equal for dyspepsia and constipation.

Gillingham, England, had a grave digger aged 75. In 87 years he had buried over 12,000 persons.

Paper was first manufactured in the East, and was introduced into Europe by the Moors in the eighth century.

The green ants of Australia make nests by bending leaves together.

STORIES OF RELIEF.

Two Letters to Mrs. Pinkham.

Mrs. JOHN WILLIAMS, Englishtown, N. J., writes:
"DEAR MRS. PINKHAM:—I cannot begin to tell you how I suffered before taking your remedies. I was so weak that I could hardly walk across the floor without falling. I had womb trouble and such a bearing-down feeling; also suffered with my back and limbs, pain in womb, inflammation of the bladder, piles and indigestion. Before I had taken one bottle of Lydia E. Pinkham's Vegetable Compound I felt a great deal better, and after taking two and one-half bottles and half a box of your Liver Pills I was cured. If more would take your medicine they would not have to suffer so much."

Mrs. JOSEPH PETERSON, 513 East St., Warren, Pa., writes:
"DEAR MRS. PINKHAM:—I have suffered with womb trouble over fifteen years. I had inflammation, enlargement and displacement of the womb. I had the backache constantly, also headache, and was so dizzy. I had heart trouble, it seemed as though my heart was in my throat at times choking me. I could not walk around and I could not lie down, for then my heart would beat so fast I would feel as though I was smothering. I had to sit up in bed nights in order to breathe. I was so weak I could not do anything."

"I have now taken several bottles of Lydia E. Pinkham's Vegetable Compound, and used three packages of Sanative Wash, and can say I am perfectly cured. I do not think I could have lived long if Mrs. Pinkham's medicine had not helped me."

Bishop Scott Academy Founded 1879
A Boarding and Day School for boys. Military discipline in charge of U. S. Army officer. Primary, preparatory and academic departments. Manual Training or shop has recently been installed. Boys of all ages received. Special instruction in music, modern languages, stenography. Through college preparation a specialty. Catalogue on application to the principal, J. W. HILL, M.D., P. O. Drawer R, Portland, Or.

YOUR LIVER Get it Right. Keep it Right.
Moore's Revealed Remedy will do it. Three doses will make you feel better. Get it from your druggist or any wholesale drug house, or from Stewart & Holmes Drug Co., Seattle.

BUY THE GENUINE SYRUP OF FIGS
... MANUFACTURED BY ... CALIFORNIA FIG SYRUP CO. IF NOTE THE NAME.

OPIUM MORPHINE COCAINE
L. U. PLANUM Stopped at once
DR. J. C. HOFFMAN, 484 Isabella Bldg, Chicago, Ill.

HOITT'S SCHOOL FOR BOYS.
At Burlingame, San Mateo county, Cal. is one of the most thorough, careful and practical "Home Schools" to be found on the Pacific Coast. Accredited at State and Stanford Universities. Thorough preparation for business. Send for catalogue. Ira S. Horst, Ph. D., Principal. Re-opens Aug. 19th.

Centennial of Electricity.
A centennial of electricity will be celebrated at Como, Italy, the birthplace of Volta, from May to October, 1899. It is understood that everything pertaining to the advancement of electricity will be represented. At the same time an electrical congress of the world's prominent electrical engineers will be held.

The leaf of a creeping moss found in the West Indies, known as the "life diant," is absolutely indestructible by any means except immersion in boiling water or the application of a red-hot iron.

No parental care ever falls to the lot of a single member of the insect tribe. In general the eggs of an insect are destined to be hatched long after the parents are dead, so that most insects are born orphans.

Established 1780.
Baker's Chocolate,
celebrated for more than a century as a delicious, nutritious, and flesh-forming beverage, has our well-known
Yellow Label
on the front of every package, and our trade-mark, "La Belle Chocolanere," on the back.
NONE OTHER GENUINE.
MADE ONLY BY
WALTER BAKER & CO. Ltd.,
Dorchester, Mass.

MEIER & FRANK CO.'S
..Great Removal Sale..
Draws immense crowds and is bringing in mail orders at a rate that has necessitated the employment of a largely increased clerical force.
Half a million dollars' worth of goods MUST be sold before we move into our new store, and only
...Greatly Reduced Prices...
on the entire stock can bring about this result.
All mail orders filled at Removal Sale Prices.
MEIER & FRANK CO.
PORTLAND, OREGON.

A Beautiful Present
In order to further introduce ELASTIC STARCH (Flat Iron Brand), the manufacturers, J. C. Hubinger Bros. Co., of Keokuk, Iowa, have decided to GIVE AWAY a beautiful present with each package of starch sold. These presents are in the form of
Beautiful Pastel Pictures
They are 13x10 inches in size, and are entitled as follows:
Lilacs and Pansies. Wild American Poppies. Lilacs and Iris. Marguerites.
These rare pictures, four in number, by the renowned pastel artist, R. LeRoy, of New York, have been chosen from the very choicest subjects in his studio and are now offered for the first time to the public. The pictures are accurately reproduced in all the colors used in the originals, and are pronounced by competent critics, works of art. Pastel pictures are the correct thing for the home, nothing surpassing them in beauty, richness of color and artistic merit. One of these pictures will be given away with each package of Elastic Starch purchased of your grocer. It is the best laundry starch on the market, and is sold for 10 cents a package. Ask your grocer for this starch and get a beautiful picture.
ALL GROCERS KEEP ELASTIC STARCH. ACCEPT NO SUBSTITUTE

Stop drinking colored tea. Try Schilling's Best.

The Japanese have a gigantic colonization scheme on foot in Mexico.

PISO'S CURE FOR CONSUMPTION
CURES WHERE ALL ELSE FAILS
Does Not Hurt. Does Not Cost. Use in time. Sold by Druggists.

WHEAT Make money by successful speculation in Chicago. We buy and sell wheat on margin. Fortunes have been made on a small beginning by trading in futures. Write for full particulars. Best of references given. Several years' experience on the Chicago Board of Trade, and a thorough knowledge of the business. Send for our free reference book. DUNNING, HOPKINS & CO., Chicago Board of Trade Brokers, Offices in Portland, Oregon and Seattle, Wash.

CURE YOURSELF!
Use Big 44 for unnatural discharges, inflammation, irritations or ulcerations of mucous membranes. Painless, and not irritating or poisonous. Sold by Druggists, or sent in plain wrapper, by express, prepaid, for 50c. Circular sent on request.

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Plain or with Cutter. The best needle in the market. Used by all work sewers. For sale by all general merchandise stores, or by
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