

FARM AND GARDEN.

The Correct Way to Feed Straw, and Roots.

The North British Agriculturalist, in reply to a correspondent, thus describes the proper method of feeding straw and roots together: The straw should be cut one and one-half inches long, and a heaped teaspoonful of salt mixed to each bushel per day. The mixing process should be accomplished the day before the straw is to be used, and water must be within the animal's reach. Hay and roots should be cut about three-quarters of an inch long, and put into deep boxes before the animals. We prefer giving the bruised oats and a good, fresh Swiss turnip or two daily, separate from the cut hay. Rather less than an ounce of salt daily is plenty for a horse. They should get an ounce of horse every Saturday night. As to the question of pulping and straw-cutting, a good deal will depend on the power available. If water-power can be obtained, so much the better; but if animal or steam power is employed, the expense of the system will be increased. We should be surprised to find that our correspondent can keep nearly one-fourth more of cattle on his farm by means of pulping and straw-cutting. If the animals get any hay, they will consume more turnips pulped with safety, than in any other way. The great advantage of pulping is that there is no choking or blowing; the feeders are enabled to have turnips, though in a mixed state, continually before cattle, and that cattle will consume more roots and, we think, take on fat and flesh rather quickly than with any other system. In feeding deeper troughs will be required with pulped roots and cut straw than for the ordinary system practiced in the district in which our correspondent farms. We would not advise the addition of oats to the mixture, as it is, we think, too costly to be mixed in such a heap and is more satisfactory given by itself. It is a decided improvement, as preventing waste, to cut the hay given to the horses; and yet more desirable is it to bruise the oats, but we would give the hay and oats separately.

"Chufas for Stock."

A correspondent in the Southern Farmer asks through your October number for information regarding the chufas as stock food, and seems to question the correctness of certain statements made by a correspondent of the Southern Cultivator in the August number of 1873, in regard to this wonderful plant. Fifteen years' knowledge of it enables us to say that those statements are by no means extravagant, and have been borne out by results far more known as average yield. L. T. S. seems to think the assertion that "one acre of chufas fattens more hogs than ten acres of corn," a clincher. Yes, one acre of corn that would not make on an average three bushels of corn, planted in chufas will fatten more hogs than forty acres of the same land in corn. One hundred and fifty bushels per acre is the average yield of chufas, and that will not grow peas. There is no food in the world that fattens hogs so rapidly and thoroughly, and that gives such sweetness to the flesh; being very spongy, they seek it with great avidity. It is a fine food for poultry, and attracts all the birds in a neighborhood when thrown to the surface by hogs, yet is not depredated upon by crows like the ground pea. The crop is never failing where at all cultivated, and keeps well throughout the year in the ground, which renders it only necessary to fence off sections or a patch or field, as needed, for hogs, and you are thus enabled to have healthy and fat swine at all seasons of the year without one grain of corn or other food, even to harden the land, as is necessary when fattened on other tubercular crops. It is a boon indeed to the small and, unfortunately, is comparatively little known. We would advise every planter to plant it, and to buy the seed at any price they can be had; and be certain to leave some to their children as an inheritance, unless they promise to be tape-measurers or lawyers, which is not important should know whether swine thrive best in salt water or fresh.

Chopping Green Corn.

Many of our readers are in the habit of running all hay, straw, and stalks through the straw-cutting before feeding them, but few probably ever practiced or ever heard about chopping green food. Mr. S. J. Mechi at the variety and rendering stock free from liability to bloat or bloating, especially when the grass is wet. He says: "Young green tares, especially when cut immediately after rain, are most dangerous, with the ordinary mode of placing them before animals in unlimited quantity as cut by the scythe. The losses caused by this system in their annual total must be enormous. For thirty years I have avoided such losses by invariably feeding all green food, tares, grass, Italian ryegrass, clover and green beans, through the chaff-cutting, according to the condition of its growth. I mix more or less of fine cut straw or hay chaff with it. This absorbs its superfluous moisture, and prevents flatulence, distention and death. The same principle is applied to the variety and pulped cabbage, and mangolds in the season unless so admixed. The cost of doing all this is a trifle as compared with the serious losses occasioned by its omission. The value of a single animal would pay the extra cost for several years. In fact, I have long since arrived at the conclusion that the turning out, roaming at large, and whole food system will be given up by those who prefer profit."

Experiments With Oats.

A few years ago a farmer in Scotland, wishing to ascertain the best variety of oats for feeding purposes, procured nine of the most popular varieties. The weight per bushel of each variety, and the weight per bushel of the following table was constructed according to the results:

Shirburn oats	Doz. weight per bush.
Shirburn	45
Sandy	42
Blackberry	42
Berry Angus	42
Blackberry	41
Pollock	41
Early Dook	41
Black Tartarian	40
Blackberry	39

The oats were then "shelled," that is, deprived of the husk in the usual way practiced in oatmeal making, and the results were as follows:

Shirburn	Doz. weight per bush.
Shirburn	31
Sandy	29
Blackberry	29
Berry Angus	29
Blackberry	28
Pollock	28
Early Dook	28
Black Tartarian	27
Blackberry	27

It seems obvious that the variety which is at the head of the list table

THE HOUSEHOLD.

The Effect of Cookery on the Health: Miscellaneous Hints and Notes: A Batch of Receipts.

HEALTH AND COOKERY. The New York Times says: Among the subjects which we should have been glad to see more said about at the recent health congress in Philadelphia, is the relation of good cookery to health. We have no means of knowing how many deaths there are from unwholesome cookery among the poor people and some that are not poor; but there can be no reasonable doubt that the number is very great. The operation of this cause in increasing the bills of mortality is often, indeed, indirect and remote, but it is by no means unimportant on that account.

Potato Salad.—Cut a dozen cold boiled potatoes in thin slices and mix them thoroughly with a little onion chopped very fine, a teaspoonful of salad oil or melted butter, a chopped apple, a bit of parsley and half a gill of vinegar. This makes a nice relish for tea or lunch.

Kerosene Oil for Furniture.—Kerosene oil is the best furniture oil; it cleanses, adds a polish and preserves from the ravages of insects.

Candy.—Two cups of sugar, two large tablespoons of vinegar and half a cup of water. Boil together and add vanilla or lemon for flavor. It must be worked before it is very cold.

Chocolate for the Sick.—When an invalid uses chocolate, it should be made in the ordinary way and then suffered to stand until cold. The oily parts collected on the surface should be taken off. Then beat the liquid again, and add sugar and milk, as usual.

To Make Hair Curl.—The method employed by professional workers in hair is as follows: Wet the hair to be curled, wrap it smoothly around a cylindrical stick or tube of proper size, tie it in place, then put it in water and boil it two or three hours, remove it from the water, and let it stand in a moderate heat until it is cool. Then treat it, it will stay in curl permanently.

Baltimore Corn Bread.—One quart of milk, one pint Indian meal, three eggs, one quarter pound butter. Boil the milk, and with it scald the Indian meal; stir in gradually the meal and butter; when cold add the eggs. Bake in square tins, and half an inch thick of butter when put in pans. An excellent recipe.

Rice Pancakes.—Boil half a pound of rice to a jelly. When cold, mix it in a plate with four eggs, a little salt and nutmeg. Stir in eight ounces of butter, stir warmed, and add as much flour as will make the batter thick enough. Fry in as little lard as possible.

Castor Oil for Corns.—The Southern Medical Record says that castor oil applied to the corn, after paring closely, each night before going to bed, softens the corn and it becomes as the other flesh.

Borax Soap for Bleaching Clothes.—One ounce borax, eight quarts water, three pounds of soap. Put the borax in the water and let it boil. After it boils add the soap in small sips.

Apple Custard.—Stew three pints of apples, mash, and add four eggs, well beaten, one-quarter of a pound of butter, sugar to taste, and nutmeg; bake on a crust.

Coffee.—Never boil coffee. The reason is that not only the better part of the exhilarating escapes, but the extractive properties, which, if largely used, render the system unhealthy, are alone present. Bring up to the boiling point, but do not boil it. You thus get sufficient of the extractive matter to give body, retaining all the volatile, healthy and restful properties.

To Mend Chinaware.—Take a very thick solution of gum-Arabic, and stir it into plaster of Paris until the mixture is of a proper consistency. Apply it with a brush to the fractured edges of the chinaware and stick them together. In a few days it will be impossible to break the article in the same place. The whiteness of the cement renders it doubly valuable.

Raising Tobacco in the South.

In many portions of the south, before the very much of the tobacco used among the farmers was grown upon farms and plantations. In Mississippi, Florida, Georgia, Alabama, the Carolinas and Louisiana, there was considerable tobacco grown but a few years ago. Now there is but little left.

The frequent use of apples, either before or after meals, has a most healthful effect upon digestion. Better eat a few apples and more fruit. An eminent French physician thinks that the decrease of dyspepsia and bilious affections in Paris is owing to the increased consumption of apples which fruit he maintains, is an admirable prophylactic and tonic, as well as a very nourishing and easily digested article.

This is a most delicious vegetable, which would be more generally grown and used if its good qualities were better known. It may be kept till mid-winter by storing away in a cellar that does not freeze, and will furnish a rich daily treat that cannot be surpassed by any of its garden competitors.

Some cooks cut it in slices, sprinkle with salt, and then drain for an hour before cooking, and then fry in butter. A better way and less trouble, is to cut in half, longitudinally, like a melon, scrape out the interior, and mix with stale bread crumbs, grated and plenty of salt and pepper. Return the mixture to the shells, and bake with a hot fire. This is a dish for an epicure, equal to scalloped crabs.

Water as a Plant Nourisher. An experiment of considerable importance in botany has recently been conducted in England. Some plants of the watermelon, after their first germination from the seed, have been sustained wholly upon water, in which their roots were immersed, and have, in this condition, produced fruit of the finest quality. Very few plants can obtain sufficient nourishment from water alone to enable them to carry on the complete processes of blossoming and fruiting. The hyacinth, when first brought to maturity in water, has been found to flourish, and has stored in its bulb sufficient food for the maintenance of its foliage and flowers for an entire season. The water in which it apparently thrives seems to act only as a solvent of this

CLAIRVOYANCE.

The Spiritual Mystery, the Medium's Power, Mediumship, Materialization, taught in ten books, by the world famous Dr. R. W. Hall.

THE NEW YORK WEEKLY WITNESS Giving news, markets, stories, pictures and live odd items. \$1.50 per year, postage paid; for 30 cents a quarter on trial. Has reached 100,000 circulation in 3 years. Send for free sample copy.

A New Era in the Prices of Books.

Send for Catalogue containing many of the most valuable books on all subjects. Price for a copy by mail, post paid, 10 cents. Address: H. W. HILL & Co., Publishers, 111 N. W. Hill, Co., New York.

YOUNG MEN

Who wish a thorough preparation for business, will find superior advantages at Moore's Southern Business University, Atlanta, Ga. The largest and Best Practical Business School in the South. Students can enter at any time. Send for Catalogue to R. F. MOORE, President, 227 Second St. Chicago, Ill.

BOOK AGENTS WANTED

Send for Catalogue containing many of the most valuable books on all subjects. Price for a copy by mail, post paid, 10 cents. Address: H. W. HILL & Co., Publishers, 111 N. W. Hill, Co., New York.

THE MAGNETIC MIRROR.

A practical guide to those who apply to clairvoyance, and who wish to know the truth about the various European and Asiatic adepts. Price \$2.00. Address: K. COLEMAN, Publisher, 111 N. W. Hill, Co., New York.

ELASTIC TRUSS

THE ELASTIC TRUSS AND SUPPORTER. How superiorly it now supersedes all other trusses, and how it is adapted to all cases of weakness, sprain, rheumatism, etc. Address: H. W. COLLENDER, Successor to Phelan & Colender, No. 78 Broadway, New York, P. O. Box 1,847.

A HOME IN TEXAS FOR \$3.

For the second Real Estate and Gold Draining takes place at Houston, Texas, March 3, 1878.

Standard American Billiard Tables. NEW DESIGNS. Patented June 6, 1871, and December 23, 1873.

H. W. COLLENDER, Successor to Phelan & Colender.

78 Broadway, New York, P. O. Box 1,847. Cloth Balls, Cues, and everything pertaining to Billiards at lowest prices. Illustrated catalogue sent by mail.

ELASTIC TRUSS

THE ELASTIC TRUSS AND SUPPORTER. How superiorly it now supersedes all other trusses, and how it is adapted to all cases of weakness, sprain, rheumatism, etc. Address: H. W. COLLENDER, Successor to Phelan & Colender, No. 78 Broadway, New York, P. O. Box 1,847.

Standard American Billiard Tables.

NEW DESIGNS. Patented June 6, 1871, and December 23, 1873.

H. W. COLLENDER, Successor to Phelan & Colender.

78 Broadway, New York, P. O. Box 1,847. Cloth Balls, Cues, and everything pertaining to Billiards at lowest prices. Illustrated catalogue sent by mail.

ELASTIC TRUSS

THE ELASTIC TRUSS AND SUPPORTER. How superiorly it now supersedes all other trusses, and how it is adapted to all cases of weakness, sprain, rheumatism, etc. Address: H. W. COLLENDER, Successor to Phelan & Colender, No. 78 Broadway, New York, P. O. Box 1,847.

Standard American Billiard Tables.

NEW DESIGNS. Patented June 6, 1871, and December 23, 1873.

H. W. COLLENDER, Successor to Phelan & Colender.

78 Broadway, New York, P. O. Box 1,847. Cloth Balls, Cues, and everything pertaining to Billiards at lowest prices. Illustrated catalogue sent by mail.

ELASTIC TRUSS

THE ELASTIC TRUSS AND SUPPORTER. How superiorly it now supersedes all other trusses, and how it is adapted to all cases of weakness, sprain, rheumatism, etc. Address: H. W. COLLENDER, Successor to Phelan & Colender, No. 78 Broadway, New York, P. O. Box 1,847.

Standard American Billiard Tables.

NEW DESIGNS. Patented June 6, 1871, and December 23, 1873.

H. W. COLLENDER, Successor to Phelan & Colender.

78 Broadway, New York, P. O. Box 1,847. Cloth Balls, Cues, and everything pertaining to Billiards at lowest prices. Illustrated catalogue sent by mail.

ELASTIC TRUSS

THE ELASTIC TRUSS AND SUPPORTER. How superiorly it now supersedes all other trusses, and how it is adapted to all cases of weakness, sprain, rheumatism, etc. Address: H. W. COLLENDER, Successor to Phelan & Colender, No. 78 Broadway, New York, P. O. Box 1,847.

CLAIRVOYANCE.

The Spiritual Mystery, the Medium's Power, Mediumship, Materialization, taught in ten books, by the world famous Dr. R. W. Hall.

THE NEW YORK WEEKLY WITNESS Giving news, markets, stories, pictures and live odd items. \$1.50 per year, postage paid; for 30 cents a quarter on trial. Has reached 100,000 circulation in 3 years. Send for free sample copy.

A New Era in the Prices of Books.

Send for Catalogue containing many of the most valuable books on all subjects. Price for a copy by mail, post paid, 10 cents. Address: H. W. HILL & Co., Publishers, 111 N. W. Hill, Co., New York.

YOUNG MEN

Who wish a thorough preparation for business, will find superior advantages at Moore's Southern Business University, Atlanta, Ga. The largest and Best Practical Business School in the South. Students can enter at any time. Send for Catalogue to R. F. MOORE, President, 227 Second St. Chicago, Ill.

BOOK AGENTS WANTED

Send for Catalogue containing many of the most valuable books on all subjects. Price for a copy by mail, post paid, 10 cents. Address: H. W. HILL & Co., Publishers, 111 N. W. Hill, Co., New York.

THE MAGNETIC MIRROR.

A practical guide to those who apply to clairvoyance, and who wish to know the truth about the various European and Asiatic adepts. Price \$2.00. Address: K. COLEMAN, Publisher, 111 N. W. Hill, Co., New York.

ELASTIC TRUSS

THE ELASTIC TRUSS AND SUPPORTER. How superiorly it now supersedes all other trusses, and how it is adapted to all cases of weakness, sprain, rheumatism, etc. Address: H. W. COLLENDER, Successor to Phelan & Colender, No. 78 Broadway, New York, P. O. Box 1,847.

A HOME IN TEXAS FOR \$3.

For the second Real Estate and Gold Draining takes place at Houston, Texas, March 3, 1878.

Standard American Billiard Tables.

NEW DESIGNS. Patented June 6, 1871, and December 23, 1873.

H. W. COLLENDER, Successor to Phelan & Colender.

78 Broadway, New York, P. O. Box 1,847. Cloth Balls, Cues, and everything pertaining to Billiards at lowest prices. Illustrated catalogue sent by mail.

ELASTIC TRUSS

THE ELASTIC TRUSS AND SUPPORTER. How superiorly it now supersedes all other trusses, and how it is adapted to all cases of weakness, sprain, rheumatism, etc. Address: H. W. COLLENDER, Successor to Phelan & Colender, No. 78 Broadway, New York, P. O. Box 1,847.

Standard American Billiard Tables.

NEW DESIGNS. Patented June 6, 1871, and December 23, 1873.

H. W. COLLENDER, Successor to Phelan & Colender.

78 Broadway, New York, P. O. Box 1,847. Cloth Balls, Cues, and everything pertaining to Billiards at lowest prices. Illustrated catalogue sent by mail.

ELASTIC TRUSS

THE ELASTIC TRUSS AND SUPPORTER. How superiorly it now supersedes all other trusses, and how it is adapted to all cases of weakness, sprain, rheumatism, etc. Address: H. W. COLLENDER, Successor to Phelan & Colender, No. 78 Broadway, New York, P. O. Box 1,847.

Standard American Billiard Tables.

NEW DESIGNS. Patented June 6, 1871, and December 23, 1873.

H. W. COLLENDER, Successor to Phelan & Colender.

78 Broadway, New York, P. O. Box 1,847. Cloth Balls, Cues, and everything pertaining to Billiards at lowest prices. Illustrated catalogue sent by mail.

ELASTIC TRUSS

THE ELASTIC TRUSS AND SUPPORTER. How superiorly it now supersedes all other trusses, and how it is adapted to all cases of weakness, sprain, rheumatism, etc. Address: H. W. COLLENDER, Successor to Phelan & Colender, No. 78 Broadway, New York, P. O. Box 1,847.

Standard American Billiard Tables.

NEW DESIGNS. Patented June 6, 1871, and December 23, 1873.

H. W. COLLENDER, Successor to Phelan & Colender.

78 Broadway, New York, P. O. Box 1,847. Cloth Balls, Cues, and everything pertaining to Billiards at lowest prices. Illustrated catalogue sent by mail.

ELASTIC TRUSS

THE ELASTIC TRUSS AND SUPPORTER. How superiorly it now supersedes all other trusses, and how it is adapted to all cases of weakness, sprain, rheumatism, etc. Address: H. W. COLLENDER, Successor to Phelan & Colender, No. 78 Broadway, New York, P. O. Box 1,847.

CLAIRVOYANCE.

The Spiritual Mystery, the Medium's Power, Mediumship, Materialization, taught in ten books, by the world famous Dr. R. W. Hall.

THE NEW YORK WEEKLY WITNESS Giving news, markets, stories, pictures and live odd items. \$1.50 per year, postage paid; for 30 cents a quarter on trial. Has reached 100,000 circulation in 3 years. Send for free sample copy.

A New Era in the Prices of Books.

Send for Catalogue containing many of the most valuable books on all subjects. Price for a copy by mail, post paid, 10 cents. Address: H. W. HILL & Co., Publishers, 111 N. W. Hill, Co., New York.

YOUNG MEN

Who wish a thorough preparation for business, will find superior advantages at Moore's Southern Business University, Atlanta, Ga. The largest and Best Practical Business School in the South. Students can enter at any time. Send for Catalogue to R. F. MOORE, President, 227 Second St. Chicago, Ill.

BOOK AGENTS WANTED

Send for Catalogue containing many of the most valuable books on all subjects. Price for a copy by mail, post paid, 10 cents. Address: H. W. HILL & Co., Publishers, 111 N. W. Hill, Co., New York.

THE MAGNETIC MIRROR.

A practical guide to those who apply to clairvoyance, and who wish to know the truth about the various European and Asiatic adepts. Price \$2.00. Address: K. COLEMAN, Publisher, 111 N. W. Hill, Co., New York.

ELASTIC TRUSS

THE ELASTIC TRUSS AND SUPPORTER. How superiorly it now supersedes all other trusses, and how it is adapted to all cases of weakness, sprain, rheumatism, etc. Address: H. W. COLLENDER, Successor to Phelan & Colender, No. 78 Broadway, New York, P. O. Box 1,847.

A HOME IN TEXAS FOR \$3.

For the second Real Estate and Gold Draining takes place at Houston, Texas, March 3, 1878.

Standard American Billiard Tables.

NEW DESIGNS. Patented June 6, 1871, and December 23, 1873.

H. W. COLLENDER, Successor to Phelan & Colender.

78 Broadway, New York, P. O. Box 1,847. Cloth Balls, Cues, and everything pertaining to Billiards at lowest prices. Illustrated catalogue sent by mail.

ELASTIC TRUSS

THE ELASTIC TRUSS AND SUPPORTER. How superiorly it now supersedes all other trusses, and how it is adapted to all cases of weakness, sprain, rheumatism, etc. Address: H. W. COLLENDER, Successor to Phelan & Colender, No. 78 Broadway, New York, P. O. Box 1,847.

Standard American Billiard Tables.

NEW DESIGNS. Patented June 6, 1871, and December 23, 1873.

H. W. COLLENDER, Successor to Phelan & Colender.

78 Broadway, New York, P. O. Box 1,847. Cloth Balls, Cues, and everything pertaining to Billiards at lowest prices. Illustrated catalogue sent by mail.

ELASTIC TRUSS

THE ELASTIC TRUSS AND SUPPORTER. How superiorly it now supersedes all other trusses, and how it is adapted to all cases of weakness, sprain, rheumatism, etc. Address: H. W. COLLENDER, Successor to Phelan & Colender, No. 78 Broadway, New York, P. O. Box 1,847.

Standard American Billiard Tables.

NEW DESIGNS. Patented June 6, 1871, and December 23, 1873.

H. W. COLLENDER, Successor to Phelan & Colender.

78 Broadway, New York, P. O. Box 1,847. Cloth Balls, Cues, and everything pertaining to Billiards at lowest prices. Illustrated catalogue sent by mail.

ELASTIC TRUSS

THE ELASTIC TRUSS AND SUPPORTER. How superiorly it now supersedes all other trusses, and how it is adapted to all cases of weakness, sprain, rheumatism, etc. Address: H. W. COLLENDER, Successor to Phelan & Colender, No. 78 Broadway, New York, P. O. Box 1,847.

Standard American Billiard Tables.

NEW DESIGNS. Patented June 6, 1871, and December 23, 1873.

H. W. COLLENDER, Successor to Phelan & Colender.

78 Broadway, New York, P. O. Box 1,847. Cloth Balls, Cues, and everything pertaining to Billiards at lowest prices. Illustrated catalogue sent by mail.

ELASTIC TRUSS

THE ELASTIC TRUSS AND SUPPORTER. How superiorly it now supersedes all other trusses, and how it is adapted to all cases of weakness, sprain, rheumatism, etc. Address: H. W. COLLENDER, Successor to Phelan & Colender, No. 78 Broadway, New York, P. O. Box 1,847.

CLAIRVOYANCE.

The Spiritual Mystery, the Medium's Power, Mediumship, Materialization, taught in ten books, by the world famous Dr. R. W. Hall.

THE NEW YORK WEEKLY WITNESS Giving news, markets, stories, pictures and live odd items. \$1.50 per year, postage paid; for 30 cents a quarter on trial. Has reached 100,000 circulation in 3 years. Send for free sample copy.

A New Era in the Prices of Books.

Send for Catalogue containing many of the most valuable books on all subjects. Price for a copy by mail, post paid, 10 cents. Address: H. W. HILL & Co., Publishers, 111 N. W. Hill, Co., New York.

YOUNG MEN

Who wish a thorough preparation for business, will find superior advantages at Moore's Southern Business University, Atlanta, Ga. The largest and Best Practical Business School in the South. Students can enter at any time. Send for Catalogue to R. F. MOORE, President, 227 Second St. Chicago, Ill.

BOOK AGENTS WANTED

Send for Catalogue containing many of the most valuable books on all subjects. Price for a copy by mail, post paid, 10 cents. Address: H. W. HILL & Co., Publishers, 111 N. W. Hill, Co., New York.

THE MAGNETIC MIRROR.

A practical guide to those who apply to clairvoyance, and who wish to know the truth about the various European and Asiatic adepts.