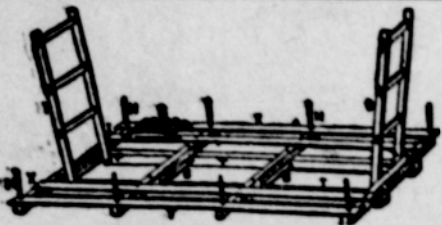


FARMS AND FARMERS



Handy Combination Hayrack.

The combination hayrack shown in the first illustration is a convenient one. It is bed pieces of pine or other straight grained light wood fourteen or sixteen feet in length, eight inches wide and three inches thick; if of oak or other hard wood, two and one-half inches thick will give sufficient

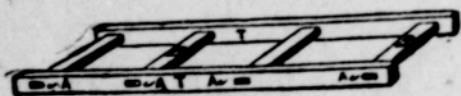


COMBINATION HAYRACK.

strength. Four crosspieces, B, of hard wood one and one-quarter inches thick and six inches wide, are mortised and firmly secured to the bed pieces. This constitutes the frame or foundation and is shown in the second cut. It is frequently used separately to haul rails, boards, stones, manure, etc., and is a convenient, strong and handy arrangement for the purpose. In the first cut is shown the rigging complete, of which its four crosspieces or arms, P, are seven and one-half feet in length, five inches wide and two and one-half inches thick.

If designed for a "sectional rigging" and to prevent side movement a half inch groove is cut into the lower sides of the cross arms, P, so that they fit closely upon the bed pieces. To prevent a forward or backward movement eight strong iron hooks are attached by staples to the sides of the cross arms and when placed upon the bed pieces are readily hooked into the staples, A. Thus arranged one man can easily place the rigging upon or take it from the wagon; or, if desired, bolts may be used to fasten all together by passing them through the cross arms and bed pieces. There is not 25 cents difference in the expense.

Standards, D, can be either stationary or hinged so as to be quickly lowered, raised or removed by a small bolt, as shown at Y. The standards should be six and one-half feet high and quite strong to withstand the pressure of the load as well as to serve as a ladder. The boards, X, should be of the same length as the bed pieces and one inch thick and six inches wide of straight grained light wood. Wooden pins or stakes, N, are inserted as shown and should be only slightly sharpened. Should the hind wheels project above the boards, X, bridge



FRAME OF BED PIECES.

over them, as shown at S. Wash with petroleum and keep under shelter when not in use.—Country Gentleman.

Breed and Feed.

Those who take the position that the "breed is in the feed" may learn something from the experiment made at the Illinois experiment station, where two cows were given the same treatment, both receiving the same quantity of food and both given an opportunity of showing what they could do, yet there was a great variation in the results, one cow largely excelling the other. Without proper food and a plentiful supply, no animal can produce to her fullest capacity, but it is a fact that the breed is an important matter, and some cows will yield twice as much as others, no matter how well fed both may be.

Weevil Optimism.

There are people who believe that the advent of the boll weevil will ultimately prove a good thing for the country and who regard the little insect as a blessing in disguise. We hope they are right. It is argued that the boll weevil will bring about a readjustment of labor conditions; will break up the cotton system and substitute diversified farming, truck and fruit growing.—Homer (La.) Guardian-Journal.

Green Food for Stock.

When the pastures begin to give out there will be a falling off of milk from the cows. This is due to the fact that the farmer does not supply the loss of green food from the pasture. A plot of corn fodder, used as green food, being given the cows at night, will materially assist in preventing the loss of milk. A change of food from green to dry substances will nearly always cause the falling off in milk, for which reason the change from green to dry food should be gradual and never suddenly.

Growing Cucumbers for Pickling.

Factories for pickling cucumbers are being established wherever the farmers can be induced to become interested. Small pickles, not over 2 1/4 inches long, usually bring about 50 cents per bushel, a bushel containing about 800 pickles. The average yield is estimated at 100 bushels per acre, though several hundred bushels may be grown upon an acre. The mildew destroys the vines in some sections, but this is kept down by spraying. The striped cucumber beetle, which can not be destroyed by paris green or ordinary insecticides, is a formidable enemy where it makes its appearance. The long green varieties of cucumbers are used. Plenty of manure should be applied. A fertilizer consisting of one part nitrogen, one part phosphoric acid and two parts of potash is about the proper formula for cucumbers. Cucumbers are salted with two quarts of salt per bushel of cucumbers, packed closely in tierces or barrels, and enough brine added to cover them. The brine should be added daily, as evaporation lowers the water in the vessel and exposes the cucumbers, which may damage them. Growers can co-operate, form a joint stock company, and sell the pickles on the market, thus securing the largest profit possible from growing them.

Safe Stepladder.



Build your stepladder like this, and it will never slip.

The Peanut Trade.

Peanuts have become an important article of American foreign commerce in the last six years, especially on the import side. In spite of the fact that we produce about 12,000,000 bushels a year. Peanut imports have grown in value from \$6,000 in 1900 to \$500,000 this year, while our exports thereof will approximate \$300,000. When this fiscal year closes we shall have to list peanuts for nearly \$1,000,000 of our total foreign commerce for the year, according to the Bureau of Statistics of the Department of Commerce and Labor.

The peanut acreage in this country increased 150 per cent and production 233 per cent between 1890 and 1900. There are under cultivation now 517,000 acres, producing 11,905,000 bushels. The crop is concentrated in a few Southern States, Virginia supplying one-third of it, North Carolina another third.—New York Sun.

Poultry as a Business.

Is there progress in poultry keeping? Read the market reports. Look at the amount of poultry advertising done today as compared with five years ago. How did the winter prices of eggs in the last five years of the nineteenth century compare with those of the first five years of this? Thousands of people are to-day making a comfortable living and many have become independent by raising poultry and eggs for the market. It has been proven by experiments that it costs no more to produce a pound of poultry than it does to produce a pound of pork or beef, yet poultry is always worth more per pound than any other meat and sells just as readily.

Teaching Botany in Public Schools.

In country schools botany should be taught by devoting an hour or two each week, in the growing seasons, to excursions to the fields and woods, plants being selected, described and classified. By this mode of teaching, an interest in botany will be created on the part of the children. A flower garden in connection with the school should also be an advantage.

New Idea in Fertilizers.

The Southern Illinois Penitentiary is now preparing lime stone dust for distribution among farmers for fertilizing purposes. The dust is put up in sacks at the prison and is sold to farmers at 50 cents a sack. It is said to be one of the finest fertilizers known.—Chester Herald.

Good draft horses now bring from \$200 to \$300. It is little wonder, therefore, that well-advised farmers pay fancy prices for imported brood mares, when 3-year-olds bring such prices.—Bethany Republican.

For Coughs and Colds

There is a remedy over sixty years old—Ayer's Cherry Pectoral. Of course you have heard of it, probably have used it. Once in the family, it stays; the one household remedy for coughs and hard colds on the chest. Ask your doctor about it.

"I have had pneumonia three times, and Ayer's Cherry Pectoral has brought me safely through each time. I have just recovered from my last attack, aged sixty-seven. No wonder I praise it."—E. V. HIGGINS, Stevens Point, Wis.

Made by J. C. Ayer & Co., Lowell, Mass. Also manufacturers of
Ayer's
SARSAPARILLA,
PILLS,
HAIR VIGOR.

Ayer's Pills increase the activity of the liver, and thus aid recovery.

London's 101 Parks.

One of the most useful activities of the London County Council has been in the extension of the park system of the metropolis, which now includes, under the management of the Council, nearly 5,000 acres.

The acquirement and development has cost about £8,500,000, and the annual charge for maintenance comes to £565,000, which adds about a half penny in the pound to the rates, or about two-tenths of 1 per cent. The cost includes the salaries of an outdoor staff of 843 men and women.

The Council came into existence in 1889, and succeeded to the metropolitan board of public works in the care of the parks, but of course with larger powers. In all fifty-seven new parks have been added since then out of the total that come under the Council's management.—Park and Cemetery.

The Sedan-Chair.

Perhaps some expert in the Siamese language will tell us what is its word for "sedan-chair." When the King of Siam's minister, protesting against his majesty's favor toward motoring, suggested recently that "the royal sedan-chair" was always at his disposal, it is improbable that he used a word reminiscent of the French town. For it is from the scene of Napoleon III.'s collapse that the sedan-chair takes its name, and perhaps remote posterity will suppose that it had some connection with that event. But Sedan first produced these conveyances centuries ago, and they were seen in England in 1581. One used by James I.'s Buckingham provoked great popular outcry against the employment of men as beasts of burden. Sir S. Duncombe is credited with having introduced them to London in 1634. And Bath knows the Pickwickian sedan-chair to this day.—London Chronicle.

Lesson from the Past.

Thomas Jefferson was writing the immortal Declaration of Independence, and had just evolved the revolutionary doctrine that all men are endowed with certain inalienable rights, among which are "life, liberty and the pursuit of happiness."

"Of course," he reflected, "there will be about one week in the year when the boy with the cannon cracker or the toy pistol will be at liberty, in his pursuit of happiness, to take anybody's life."

Smiling as he thought of the havoc the automobilists would play with these principles some day, he proceeded to submit a few facts for the consideration of a candid world.—Chicago Tribune.

The Boy's Opportunity.

"Now, wouldn't it be funny," said Popple, playfully, "if I were to become a little boy again?"

"Mebbe it wouldn't be so funny for you, pa," replied his bright young son, "if you was to be littler'n me, pa, I think I'd square up a few things."

ENGRAVING Write Us
PLATES
FOR PRINTING
HICKS-CHATTEN
Portland Oregon

Portland Business College

TENTH AND MORRISON STREETS

PORTLAND, OREGON

A. P. ARMSTRONG, LL. B., PRINCIPAL

Quality is our motto. We educate for success, and send each student to a position when competent—many more calls for help than we can meet. Individual instruction insures rapid progress. All modern methods of bookkeeping are taught; also rapid calculations, correspondence, commercial law, office work, etc. Chartier is our shorthand—easy, rapid, legible. Beautiful catalogue, business forms and penmanship free.

P. N. U. No. 37-07

WHEN writing to advertisers please mention this paper.

HILL MILITARY ACADEMY

A boarding and day school for young men and boys. Accredited to Stanford, Berkeley, Cornell, Amherst and all state universities and agricultural colleges. The principal has had 28 years' experience in Portland. Make reservations now. For illustrated catalogue and other literature address

J. W. HILL, M. D., Principal and Proprietor, PORTLAND, OREGON

Save the Babies.

INFANT MORTALITY is something frightful. We can hardly realize that of all the children born in civilized countries, twentytwo per cent., or nearly one-quarter, die before they reach one year; thirtyseven 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."

GENUINE CASTORIA ALWAYS Bears the Signature of

Chas. H. Fletcher.
The Kind You Have Always Bought

In Use For Over 30 Years.

THE CENTAUR COMPANY, 77 MURRAY STREET, NEW YORK CITY.

900 DROPS

CASTORIA

A Vegetable Preparation for Assimilating the Food and Regulating the Stomachs and Bowels of

INFANTS & CHILDREN

Promotes Digestion, Cheerfulness and Rest. Contains neither Opium, Morphine nor Mineral. NOT NARCOTIC.

(Prescribed by Old Dr. SAMUEL PITCHER)

Pumpkin Seed -
Aloe Sassa -
Rhubarb Sassa -
Aloe Sassa -
Aloe Sassa -
Aloe Sassa -
Aloe Sassa -
Aloe Sassa -
Aloe Sassa -
Aloe Sassa -

A Perfect Remedy for Constipation, Sour Stomach, Diarrhoea, Worms, Convulsions, Feverishness and LOSS OF SLEEP.

Fac-Simile Signature of
Chas. H. Fletcher.
NEW YORK.

At 6 months old
35 DROPS - 35 CENTS

EXACT COPY OF WRAPPER.

PUTNAM FADELESS DYES

Color more goods brighter and faster colors than any other dye. One 10c package colors silk, wool and cotton equally well and is guaranteed to give perfect results. Ask dealer, or we will send post paid at 10c a package. Write for free booklet how to dye, bleach and mix colors. MONROE DRUG COMPANY, Quincy, Illinois.