

# KANSAS FARMER

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## BREEDERS' DIRECTORY.

Cards of four lines or less will be inserted in the Breeders' Directory for \$15 per year or \$3.00 for six months; each additional line, \$2.50 per year. A copy of the paper will be sent to the advertiser during the continuance of the card.

### HORSES.

**JOSEPH FUHRMAN, NORTH WICHITA, KAS.**—Breeder of French Coach and Percheron horses. Pure-bred young stock, of both sexes, for sale; also, grade animals. Prices as low as same quality of stock can be had elsewhere. Time given if desired. Inspection invited. Letters promptly answered. Mention this paper.

**PROSPECT FARM—CLYDESDALE STALLIONS, SHORT-HORN CATTLE, POLAND-CHINA HOGS.** Write for prices of finest animals in Kansas. H. W. McAfee, Topeka, Kas.

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**ENGLISH RED POLLED CATTLE AND COTSWOLD SHEEP.**—Young stock for sale, pure-bloods and grades. Your orders solicited. Address L. K. Haseltine, Dorchester, Green Co., Mo.

**NEOSHO VALLEY HERD OF SHORT-HORNS.**—Imported Buccaneer at head. Registered bulls, heifers and cows at bed-rock prices. D. P. Norton, Council Grove, Kas.

**H. W. CHENEY, North Topeka, Kas., breeder of HOLSTEIN-FRIESIAN CATTLE.** Farm four miles north of town.

**VALLEY GROVE HERD OF SHORT-HORNS.**—For sale, choice young bulls and heifers at reasonable prices. Call on or address Thos. P. Babst, Dover, Kas.

**HOLSTEIN-FRIESIANS** From this herd were furnished some of the winners at the World's Fair. Write for catalogue. M. E. MOORE, CAMERON, MO.

### POULTRY.

**FOR SALE** Pure-bred Dark Brahmas, Partridge Cochins, Houdans, S. L. Wyandottes. Hens, pullets and cockerels at \$1.50 each; young stock at 75 cents each. W. H. Rauch, Wichita, Kas.

**A. B. DILLE & SONS, EDGERTON, KAS.,** breeders of choice B. P. Rocks, S. L. Wyandottes, Light Brahmas and M. B. turkeys. Chicken eggs \$1 to \$2 per 15; turkey eggs \$3 per 11. Satisfaction guaranteed.

**EUREKA POULTRY YARDS.**—L. E. Pixley, Emporia, Kas., breeder of Plymouth Rocks, S. Wyandottes, Buff Cochins, B. and White Leghorns, B. Langshans, M. B. Turkeys and Pekin ducks. Chicks at all times. Eggs in season.

### SWINE.

**S. McCULLOUGH,** Ottawa, Kansas. Breeder of Pure-bred BERKSHIRE SWINE. Stock for sale at all times. Satisfaction guaranteed. Write for what you want.

**SELECT HERD OF BERKSHIRES** Have for sale pigs from State fair winners. Can fill classes for show. Boars for fall service. A few choice sows bred. Address G. W. BERRY, Berryton, Shawnee Co., Kas.

### CATTLE.

**SUNNY SLOPE FARM,** C. S. CROSS, Proprietor, Emporia, Kas. Breeder of PURE-BRED HEREFORD CATTLE. Herd headed by Wild Tom 51592, a son of Beau Real 11055 and assisted by sons of Cherry Boy 26176, Archibald 1st 39253 and Washington 22615. 200 head, all ages, in herd. Strong in the blood of Lord Wilton, Anxiety and Horace. A choice lot of young bulls and heifers, fit for any company. Correspondence solicited, or, better still, a personal inspection invited.

**SHANNON HILL STOCK FARM.** G. W. GLICK, ATCHISON, KAS. Breeds and has for sale Bates and Bates-topped SHORT-HORNS. Waterloo, Kirklevington, Filbert, Cragg, Princess, Gwynne, Lady Jane and other fashionable families. The grand Bates bulls Waterloo Duke of Shannon Hill No. 89879 and Winsome Duke 11th 115,137 at head of herd. Choice young bulls for sale now. Visitors welcome. Address W. L. CHAFFEE, Manager.

### SWINE.

**JOHN KEMP,** North Topeka, Kas., breeder of improved Chester White Swine. Some fine young boars fit for service for sale. Correspondence invited.

**BERKSHIRE, Chester White, Jersey Red and Poland China PIGS.** Jersey, Guernsey and Holstein Cattle. Thoroughbred Sheep, Fancy Poultry, Hunting and House Dogs. Catalogue. S. W. SMITH, Cochranville, Chester Co., Penna.

**A. E. STALEY,** Ottawa, Kansas. CHESTER WHITES AND POLAND-CHINAS. Light Brahma cockerels, \$1.50.

**W. S. ATTEBURY,** Rossville, Kansas. BREEDER OF Chester Whites Exclusively. Young stock at all times. Satisfaction guaranteed.

**PRAIRIE COTTAGE FARM** Home of the Chester White Hogs. G. J. HUGGINS, Louisville and Wamego, Kansas. Have for sale brood sows, two boars, also a nice lot of spring pigs of both sexes, the get of my herd boars, Ben Buster 6189 and Jerry Simpson 6161. Correspondence and inspection invited. Prices reasonable.

**Thoroughbred Duroc-Jersey Hogs** Registered stock. Send for 44-page catalogue, prices and history, containing much other useful information to young breeders. Will be sent on receipt of stamp and address. J. M. STONEBRAKER, Panaola, Ill.

**P. A. PEARSON** Kinsley, Kansas, Breeder of Poland-China Swine All ages for sale. Herd headed by Dandy Jim Jr. and Royalty Medium, a son of Free Trade.

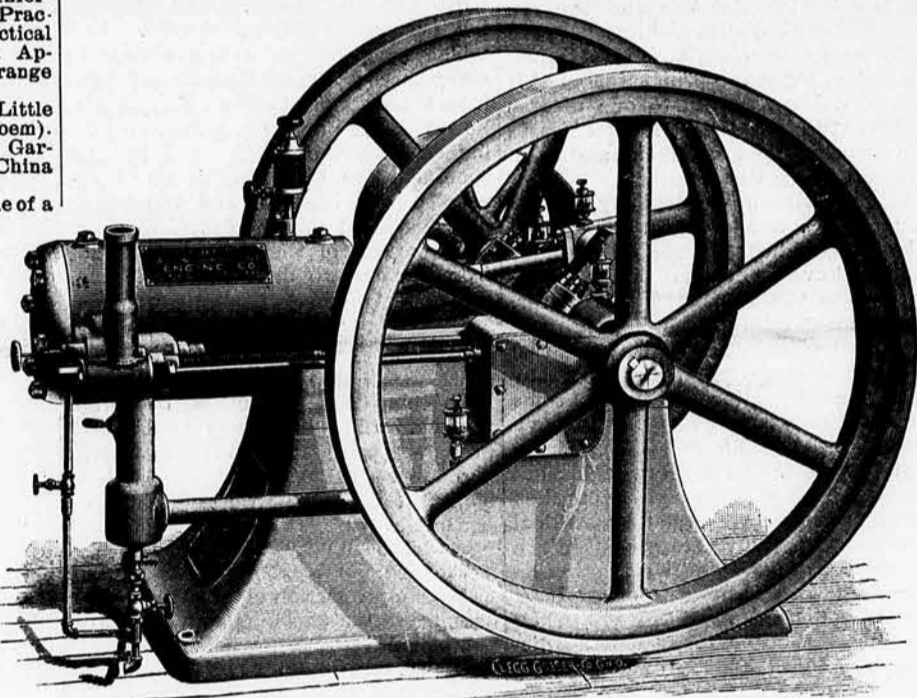
**JOHN A. DOWELL'S HERD REGISTERED POLAND-CHINA SWINE.** Robinson, Brown Co., Kas. 130 head, all ages, headed by Onward 5981 S., sired by George Wilkes. He is assisted by Tecumseh Wilkes, sired by General Wilkes 2127. The females belong to the best strains. Come or write.

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**MARTIN MEISENHEIMER, Registered Poland-China Swine.** Hiawatha, Brown Co., Kas. 20 brood sows, headed by Tecumseh Free Trade 10783 S., assisted by a son of Benton's Last 8827 S. Some of best females bred to Butler's Darkness, Black U. S. Nemo (Vol. 9) and Victor M. Jr. (Vol. 9). Correspondence and inspection invited.

**RIVERSIDE HERD Poland-China Swine.** For sale sows bred to farrow in September and October. Also young stock at reasonable figures at all times. Satisfaction guaranteed. Correspondence as well as inspection invited. J. V. RANDOLPH, Emporia, Kas. Established 1868.

(Breeders' Directory continued on page 16.)



WEBER GASOLINE ENGINE. (See page 4.)

### SWINE.

**MAPLE GROVE HERD OF FANCY BRED** Poland-China swine. Also Light Brahma fowls. Owned by Wm. Plummer & Co., Osage City, Kas. Stock of all ages for sale at reasonable rates.

**FOR SALE**—Duroc-Jersey pigs; also Poland-China. Bronze turkeys, Toulouse geese, Pekin ducks, Barred Plymouth Rock and Brown Leghorn chickens. Ready to ship out. J. M. Young, Liberty, Kas.

**OHIO IMPROVED CHESTER SWINE**—Pure-bred and registered. Stock of all ages and both sexes for sale by H. S. Day, Dwight, Morris Co., Kas.

**FOR SALE CHEAP**—Choice Poland-China boar pigs, Cotswold and Merino bucks, fifteen varieties of pure-bred poultry. Prize-winners. No catalogue. Address with stamp, H. H. Hague & Son, Walton, Kas.

**DIETRICH & GENTRY, RICHMOND, KAS.** (formerly Ottawa) have several fine, growthy young boars at very reasonable prices. Young sows can be bred to High Ideal 12115 S. A fine crop of fall pigs very cheap. Write. Mention KANSAS FARMER.

**TOPEKA HERD OF BERKSHIRES.**—Strong-framed, mellow and prolific. State fair prize-winners and their produce for sale. Also, Pekin ducks of enormous size. H. B. COWLES, Topeka, Kas.

**D. TROTT, Abilene, Kas.**—Pedigreed Poland-Chinas and Duroc-Jerseys. Also M. B. Turkeys, Light Brahma, Plymouth Rock, S. Wyandotte chickens and R. Pekin ducks. Eggs. Of the best. Cheap.

**V. B. HOWEY, Box 103, Topeka, Kas.** breeder and shipper of thoroughbred Poland-China and English Berkshire swine and Silver-Laced Wyandotte chickens.

**A. W. THEMANSOON, WATHENA, KAS.**—Poland-China boars. Gilts bred to Graceful F. Sanders; he is by J. H. Sanders 27219 and out of Graceful F. 63408, by A. A., by Black U. S. Sire and dam both first-prize winners at World's Fair and descendants of Black U. S.

### CATTLE AND SWINE.

**PEDIGREED Poland-Chinas J. H. TAYLOR,** Pearl, Short-horns, Kas.

**ASHLAND STOCK FARM HERD OF THOROUGHbred** Poland-China hogs, Short-horn cattle and Plymouth Rock chickens. Boars in service, Admiral Chip No. 7919 and Abbottsford No. 23351, full brother to second-prize yearling at World's Fair. Individual merit and gilt-edged pedigree my motto. Inspection of herd and correspondence solicited. M. C. Vansell, Muscotah, Atchison Co., Kas.

### SWINE.

**T. A. HUBBARD** Rome, Kansas, Breeder of POLAND-CHINAS and LARGE ENGLISH BERKSHIRES. Two hundred head. All ages. Fifty boars and forty-five sows ready for buyers.

**BERKSHIRES.** We offer choice selections from our grand herd, headed by a great imported boar. New blood for Kansas breeders. WM. B. SUTTON & SON, Russell, Kansas.

**THE WOOD DALE BERKSHIRES** Champions of Two World's Fairs. New Orleans, 1885, best herd, largest hog any breed. At Columbian, Chicago, won ten out of eighteen first prizes, the other eight being bred at or by descendants of Wood Dale. New blood by an 1894 importation of 21 head from England. For catalogue Address N. H. GENTRY, SEDALIA, MO.

**JAMES QUOROLLO, KEARNEY, MO.** Breeder and shipper of prize-winning Large Berkshire Swine. S. C. Brown Leghorns and Bronze Turkeys. Headed by King Lee II. 29801, Mephistopheles 32412.

**BOURBON COUNTY HERD, English o Berkshire o Swine.** J. S. MAGERS, Prop., Arcadia, Kas. Imported and prize-winning American sows headed by Imp. Western Prince 3202. All selected and bred to head herds and to supply those wanting none but the best. Fall litters now can't be beat. Write or come visit me and see the herd.

**GEORGE TOPPING,** Cedar Point, Kas. (CHASE CO.) Importer, breeder and shipper of LARGE ENGLISH BERKSHIRE SWINE of best families and breeding. Choice pigs for sale at low prices. Also Single-combed Brown Leghorns and Mammoth Bronze turkeys. Eggs in season. Farm 6 miles south of Cedar Point. Mention K. F.

## The Stock Interest.

### THOROUGHbred STOCK SALES.

*Dates claimed only for sales which are advertised or are to be advertised in this paper.*

FEBRUARY 7—W. H. Wren, Marion, Poland-China swine  
 FEBRUARY 13—J. F. & P. C. Winterscheidt, Horton, and M. C. Vansell, Muscota, Poland-China swine, combination  
 FEBRUARY 14—Dan W. Evans, Fairview, and J. A. Worley, Sabetha, Poland-China swine, combination  
 FEBRUARY 28—Jno. A. Dowell, Robinson, Poland-China swine.

### HOG CHOLERA AND SWINE PLAGUE.

The United States Department of Agriculture has just issued a most valuable bulletin, No. 24, on "Hog Cholera and Swine Plague," by D. E. Salmon, D. V. M., Chief of the Bureau of Animal Industry. The following copious excerpts, which will continue through three numbers of the KANSAS FARMER, are given on account of their great value to all swine-raisers:

#### INTRODUCTORY.

The annual losses from hog cholera in the United States are unquestionably very heavy, for although all diseases of swine are called cholera by people not familiar with them, scientific investigation has confirmed the opinion of our farmers that we have a widespread and destructive plague to which the term hog cholera may be appropriately applied. The researches of the Bureau of Animal Industry, conducted in the most thorough and systematic manner and with the aid of all the appliances of modern science, have shown that there is another disease, called swine plague, which appears to be almost as common and fatal as hog cholera.

These two diseases resemble each other very closely in their symptoms, and it requires an examination of the internal organs after the animal's death, and in many cases a microscopical study, to clearly distinguish between them. Fortunately, we are able to formulate methods for the prevention, cure, and eradication of these diseases which may be applied with the same success to both. Hog cholera and swine plague are not only similar in symptoms, but in their effect upon the bodies of the affected animals. They resemble each other in that both are caused by bacteria; they must be combated by measures which will prevent exposure to these bacteria or destroy them after they have been introduced upon the premises, and the sick animals must be treated by remedies which will reduce the fever, stop the multiplication of the germs, and assist the affected organs in resuming their normal functions.

The difficulty of distinguishing between the two diseases is, therefore, of no great consequence in the practical work of controlling them. It is important to know that one or the other of these maladies is present, because this knowledge leads at once to the adoption of the measures applicable to the treatment of infectious diseases. Knowing that we have either hog cholera or swine plague to deal with, we are safe in carrying into effect the treatment recommended in this bulletin, because the agents which destroy one of these germs will generally destroy the other.

There are other infectious diseases which sometimes attack hogs, but they have either not been introduced into this country or have never approached in their destructive characters the two diseases named. The erysipelas of the continent of Europe appears to be the most fatal of the swine diseases in the countries where it is known. It has, however, never been recognized in America and probably has never been introduced on this continent. A few years ago it was proposed by enthusiastic though reckless investigators to introduce the virus of erysipelas as a vaccine for the prevention of hog cholera. The investigations of the bureau showed, however, that the diseases were not similar; that hog cholera could not be prevented by the vaccine of erysipelas; and that the only effect of the proposed measure would be the introduction of a new plague, probably as destructive as the dreaded hog cholera.

These diseases can only be managed

in the light of a thorough knowledge of their nature and characters; otherwise, the chances are that efforts for their suppression will lead to harm rather than to beneficial results.

There is a disease known as anthrax which may attack all species of warm-blooded animals, and sometimes affects the hogs in limited areas of this country. This disease does not spread from farm to farm with the rapidity nor to anything like the distance that is common with hog cholera. When it exists, cattle and sheep, and often horses, are also affected; and the hogs usually contract it from eating the carcasses of animals that have died with it. Anthrax is confined to certain regions of the country, and is seen in those regions year after year. It is not a common disease with hogs.

These are about the only diseases liable to be mistaken for hog cholera and swine plague, and as one of them has never been seen in this country, and as the other is infrequent and more often affects other species of animals, it is plain that any contagious disease confined to swine which breaks out in this country is in all probability either hog cholera or swine plague.

#### GENERAL CHARACTERS.

Hog cholera and swine plague are both very fatal and destructive. They affect hogs in all parts of the United States, and cause heavy losses, which have been estimated to reach from \$10,000,000 to \$25,000,000 annually.

Owing to the resemblance in the features of the two diseases and the impossibility of distinguishing between them except by scientific investigation, we cannot say what proportion of this loss should be ascribed to one disease and what to the other. Both diseases are known to be common, and both spread by infection.

Hog cholera is particularly fatal to young pigs, and often attacks them when the old hogs escape. The older animals have a greater power of resistance to the virus, and this power, which is also known as immunity, is increased when hogs have been exposed and only so slightly infected that they have recovered after an illness of some duration, or without showing any evident symptoms of the disease. In other words, if hog cholera breaks out among a herd of swine and is checked and apparently eradicated by medical treatment, the hogs that are saved are capable of resisting the contagion on the premises, while purchased hogs that have not been exposed will, when put with the others, contract the disease and die. This shows that the virus has remained upon the premises and the hogs have been saved not by the destruction of the contagion, but by keeping the infected hogs alive until they became immune. This is an important fact, and one which should be kept constantly in mind in applying measures of prevention.

The virus of hog cholera is more tenacious, more resisting to the conditions which affect the vitality of bacteria than that of swine plague, and it is also more easily spread and communicated to healthy animals. Swine contract hog cholera by taking the virus into the body with the food or drink, by inhaling it with the air, and less frequently by its gaining entrance through the surface of a fresh wound. On the other hand, the virus of swine plague is generally, if not always, taken into the lungs with the inhaled air.

The time that elapses between infection and the appearance of the first symptoms of illness, known as the period of incubation, varies from four to twenty days. During this period the germs are multiplying slowly and are gradually overcoming the vital powers of the animal by means of poisonous substances which they produce as the result of their growth.

#### SYMPTOMS.

The symptoms of serious diseases of swine are not as characteristic as with the larger animals. In the most acute and most severe cases the animals die very suddenly, either before sickness has been observed or after they have been ill but a few hours. Such cases are seen most frequently when the disease first appears in a herd. In the greater number of cases the progress

of the malady is slower, and there is consequently a much better opportunity to observe the symptoms. There is first seen the signs of fever, shivering, unwillingness to move, more or less loss of appetite, elevation of temperature which may reach 106 to 107° F.; the animals appear stupid and dull, and have a tendency to hide in the litter or bedding and remain covered by it. The bowels may be normal or constipated at the beginning of the attack, but later there is generally a liquid and fetid diarrhea, abundant, exhausting, and persisting to the end. The eyes are at first congested and watery, but soon the secretion thickens, becomes yellowish, accumulates in the angles and gums the lids together. The breathing is more rapid than usual and may be oppressed and labored in the later stages. There is a cough, which, however, is not very frequent, and generally heard when the animals are driven from their bed. It may be a single dry cough, or it may be paroxysmal. The skin is often congested and red over the abdomen, inner surface of the limbs, under surface of the neck, and on the ears. The color varies from a pinkish red to dark red or purple. An eruption is sometimes seen, which leaves crusts or scabs of various sizes over the skin. There is rapid loss of flesh, the animal grows weak, stands with arched back and the abdomen drawn up, and walks with a tottering, uncertain gait. There is less and less inclination or ability to move, and the weakness and exhaustion increase until death results.

The symptoms of swine plague in many cases are not noticeably different from those of hog cholera. Frequently, however, the lungs are extensively inflamed in swine plague, and in that condition the breathing is more oppressed and labored, and the cough more frequent and painful.

The course of these diseases varies from one or two days to two or three weeks.

(To be continued.)

#### A New Food for Cattle.

Chocolate manufacturers, of which there are a great many in France, are now offering to agriculturists and breeders cocoa husks, a refuse from their manufacture. The result of trial experiments of their value as feeding material has been very satisfactory. Cocoa husks are not a complete food, but mixed in proportion of one-third with ordinary food (such as fodder, roots, apple rinds, etc.) they have an excellent effect upon dairy cows, and principally upon sheep and young pigs. A chemical analysis gives the following proportion of elements in the cocoa refuse: Water, 6.28 per cent.; nitrogenous matter, 18.06; starchy matter, 13.80; fats, 3.81; cellulose, 46; mineral matters, 11 per cent. The ashes contain phosphate, lime, potash, etc. The cocoa husks contain 35 per cent. of nutritive matter, are digestible and pleasant in flavor, which are important in the feeding of cattle. Under these conditions its pecuniary value to agriculture appears to be almost equal to that of cotton cake.—*Cincinnati Price Current.*

#### Kansas Swine Breeders.

EDITOR KANSAS FARMER:—The semi-annual meeting of Kansas Swine Breeders' Association will be held Monday, January 7, at 3 o'clock p. m., in Topeka. An interesting program is being prepared. The Kansas Swine Breeders' Association is the oldest and strongest live stock association in the State. The proceedings of its meetings in the past have been of the highest order, entertaining, social and of wide influence. All who are interested in swine-growing are invited to be present at the coming meeting.

GEO. W. BERRY, President.

The annual meeting of the Missouri Swine Breeders' Association, for 1895, co-operating with the State Board of Agriculture, is announced to take place at the opera house, Chillicothe, Mo., January 8, 9 and 10. The program is full and the subjects announced by the numerous prominent breeders mark this as one of the great and important meetings of the season.

## Hungry Leather.

The natural food of leather is oil. Hard and stiff leather is soft in a minute with

## Vacuum Leather Oil.

5c. worth is a fair trial—and your money back if you want it—a swob with each can. For pamphlet, free, "How to Take Care of LEATHER," send to VACUUM OIL CO., Rochester, N. Y.

#### The American Guernsey Cattle Club.

EDITOR KANSAS FARMER:—A large number of the members of the American Guernsey Cattle Club were present or represented at the annual meeting of the club in New York, December 12. The report of the Treasurer showed a balance of \$2,231.81. The debt of \$2,000, incurred during the World's Fair contest, is still carried, but arrangements were made for payment on same. Liberal appropriations were made for the coming year.

The most important change made was the approval of a plan for the publication of the Herd Register in quarterly issues, and with a supplement to be known as the *Guernsey Breeder's Journal*. The subscription price will be \$2 a year.

This will give Guernsey breeders means of securing entries much more promptly, and also collected in compact form the latest Guernsey news and tests.

Volume 5 of the Register was presented at the meeting and is now ready for distribution.

At 1 p. m. several Guernsey breeders not members of the club came into the meeting and listened to an able address from President Betts, which opened an interesting discussion on general matters pertaining to the breeding and management of Guernseys.

President Silas Betts, Secretary and Treasurer Wm. H. Caldwell, Peterboro, N. H., were re-elected, as were also the two members of the Executive committee whose term expired, Messrs. J. M. Codman and N. K. Fairbank.

A pleasant feeling prevailed at the close of the meeting, not only regarding the success of the meeting, but over the renewed interest and growing popular demand for Guernseys, which the increased correspondence and business of the office indicated.

WM. H. CALDWELL,  
Secretary.

#### Experiments in Feeding Horses.

The Utah Experiment Station has issued bulletin No. 36, on the "Relative Value of Corn and Oats for Horses." The experiment is summed up as follows:

1. In this experiment with two sets of horses, one set fed a grain ration principally of corn and the other a grain ration principally of oats, the horses sustained their weight the better on the corn ration.
2. The feeding was divided into five periods. Part of the time one horse was fed in each set and part of the time two. In every period save one the corn-fed set did the better.
3. The feeding value of the rations seemed to vary directly as the amount of digestible matter that each contained.
4. A nutritive ratio of 1:6.9 did better than one of 1:6.2.
5. To sum up the three experiments, we find: First, that during the summer corn and timothy were not so good as oats, wheat and clover in maintaining the weight of horses; second, that during the winter corn and timothy did as well as oats, clover and timothy in maintaining the weight of horses; third, that during the spring and summer, corn, wheat or bran and mixed hay produced more gain than oats, wheat or bran and mixed hay.

The bulletins of the experiment station are sent free on application.

Any present subscriber who will send us one new subscriber and \$1, can have his or her present subscription extended thirteen weeks for this good act.



### Irrigation.

#### GASOLINE ENGINES — THEIR CONSTRUCTION AND OPERATION.

In the consideration of the irrigation problem, many interested parties have turned their attention to determining the most reliable and economical machinery with which to lift water from the immense sub-surface stores found to exist and to be annually replenished under vast areas of the plains. Some kind of pumping machinery and some kind of power to drive it is the almost universal conclusion. Among the various sources of power, the thought of those who contemplate irrigating considerable areas is centering more and more about the gasoline engine, both because of its reliability, its simplicity, the little attention needed while running and its claim to economy of fuel. This last is somewhat emphasized by the recent discoveries of vast quantities of petroleum in the southeastern part of Kansas, since, in the refining of this, large quantities of gasoline will be produced so near to the lands to be irrigated that not unlikely the price of gasoline will be greatly reduced.

In view of the great interest taken in this comparatively new kind of engine, we have asked the manufacturers of the Weber gasoline engine to describe its construction and mode of operation. They have responded as follows:

"The first and most important part of the individual pumping plant consists of the power. The problem of economical pumping is one of great interest to all interested in irrigation. To help the reader to more quickly and clearly select the different forms of pumping systems, we give below the cost of operating the following systems per horse-power per hour: Injectors, inspirators, etc., 100 pounds of coal; pulsometer or vacuum pumps, 67 pounds of coal; ordinary steam pumps, 25 pounds of coal; power pumps driven by steam engines, 10 to 25 pounds of coal; power pumps driven by gasoline engine, one-tenth gallon of gasoline.

"The exceedingly low cost of operating gasoline engines commends this power at once to the most careful consideration. The engraving on the first page illustrates an engine of this class, built by the Weber Gas and Gasoline Engine Co., 459 Southwest Boulevard, Kansas City, Mo.

"The cost of operating these engines in localities where 74¢ gasoline can be obtained in quantities at 10 cents per gallon, is 1 cent for each exerted horse-power per hour. This is a figure with which steam cannot compete, and in those localities where coal is expensive the saving in favor of the gasoline engine is still more pronounced, besides doing away with the necessity of having an engineer to constantly care for the steam engine and boiler.

"Another advantage in these engines over steam plants is that the gasoline engine is instantly started, and uses gasoline in exact proportion to the work it actually accomplishes, and as soon as stopped all expense ceases, whereas with the steam plant it is necessary to raise steam an hour or so before the power is actually needed, and when the steam engine is shut down there still remains a fire in the boiler and a quantity of steam which must go to waste.

"Owing to the simplicity and the small number of parts in the gasoline engine, the repairs on this power will not amount to one-tenth of those on a steam plant. With the steam plant grates burn out, smoke-stacks rust away, new flues are required, and in those localities where alkali water is used, the life of the boiler is very short indeed.

"Now, for the benefit of those who are not familiar with the principles and construction, the following information is given:

"The gasoline engine consists of base, cylinder, piston, connecting-rod, crank-shaft and fly-wheels. The *modus operandi* and the development of power is as follows: In starting up, on the first outstroke of the piston, a mixture of air impregnated with the proper

amount of gasoline is drawn into the cylinder, passing through the valve chambers, as shown in cut. On the instroke of the piston, this mixture in the cylinder is compressed into space between the cylinder head and the piston. The combustible mixture is then ignited by the most reliable, safest and simplest device possible, a short iron tube, closed at the outer end and connected to the interior of the cylinder, enclosed in a chimney and heated by a Bunsen burner, and the air being expanded by the heat evolved, an impulse is given to the piston. When the piston has reached the second outstroke the exhaust valve is opened and remains open during the second instroke of the piston, and the products of combustion are expelled through the exhaust pipe, which is conducted to the outer air.

"The valves are all of the direct acting poppet valve type, requiring no cleaning or oiling, as they lift squarely from their seats and without friction. These valves are seated in separate castings, so that renewal is possible when seat is worn. They are so located as to render them easy of access for grinding, if, on examination, they are found to need it. These valve chambers, and valves as well, are kept from becoming overheated by means of circulating water entirely around their seats. This is an important item and increases the life of those parts indefinitely.

"The valve gear and governor (which includes all working parts of the engine, excepting crank-shaft, piston, etc.) are encased in an iron housing, perfectly dust and grit-proof, and run constantly in oil, thereby insuring complete lubrication at all times and reducing the wear to a minimum.

"Crank-shafts and nearly all working parts are made of steel and finished to gauge. These cranks are not forged, but are slotted out of solid billets of steel and finished cold. There is not a weld in the shafts nor are they bent or formed into shape.

"All bearings are exceptionally large and strong and of the very best material. The cross-head and wrist-bearings are of phosphor bronze. The wrist-bearings are interlined with nickel babbitt.

"The fly-wheels of these engines are especially designed to meet the service required of them. They are made with heavy rims and of light but very strong and properly-proportioned arms. The wheels are exceedingly heavy, and by this is attained the necessary conservation of power which causes these engines to run with regularity of speed.

"The governor is exceedingly simple and sensitive to the slightest variation of speed in the engine, and acts accordingly. It gives the engine only as much gasoline, and at the right time, as is needed to do the work, consequently the amount of fuel used depends on the amount of work done. When only part work is done, only as many charges of gasoline are admitted and ignited as are needed to keep up the speed of the engine. When this speed is slightly exceeded, the governor does not give gasoline or air, and the engine works in a vacuum; but when the engine is worked up to its full capacity the governor gives a charge at each stroke. A steady motion under part or full load is obtained by the momentum of the two heavy fly-wheels.

"An important feature in the construction of gasoline engines consists in keeping every part of the engine from becoming overheated. In these engines water is circulated entirely around the cylinder, entirely around the valve chambers and entirely across the cylinder head. This circulation of water is not to keep the engine cool, but is to keep the engine from becoming overheated, so that it may be properly lubricated.

"These engines are fitted with the incandescent tube ignitor. This tube is kept hot by means of a Bunsen burner. The incandescent tube is the simplest, most reliable and most perfect way of effecting the ignition of gas or gasoline engines. In this engine the point of ignition is altered while the engine is in operation, thereby effecting a great saving in fuel as well

## Irrigated Farms---\$1,000!

Out of a thousand farms in **SOUTHWEST KANSAS**, of 160 acres each, we are selling a limited number equipped with an independent and permanent irrigation plant sufficient for at least ten acres on each farm. The price at which these 160 acre farms are selling is merely about what the ten acres and irrigation plant are worth.

Before buying a farm investigate this. Special terms made for Colonies. Call on us or write for particulars.

### THE SYNDICATE LANDS & IRRIGATING CORPORATION,

Room 412 New England Life Building, 9th and Wyandotte Sts., KANSAS CITY, MO.

as preventing the engine from starting backwards.

"The water tank varies with the size of engines and holds sufficient water to keep the engine at the proper temperature. The heat of the cylinder causes the water to circulate, the heated water going to the top of the tank and the cold water entering the cylinder from the bottom of the tank. The same water is used continuously, there being but a slight loss from evaporation.

"The pistons are of extraordinary length, which gives large wearing surface and adds to the life of the engine. The rings are made up in sections with a German silver spring behind each section, forcing the rings out to the walls of the cylinder at all times, taking up the wear, however slight. By this means the rings can be used indefinitely, or until they are worn out entirely. Now, with ordinary snapping, as soon as worn so far as the ring springs outward, which is slight, they are useless and must be replaced by a new set.

"In these engines the gasoline is used in its natural state, with no intermediate gas-making machinery or appliances. The conversion of gasoline to a fixed gas is one of the prime factors in determining the efficiency and reliability of gas or gasoline engines; to mete out the proper proportion of gasoline and air and mix it properly, then take care of any excess gasoline, *i. e.*, not allow it to be blown out of the exhaust pipe or wasted, is a problem only solved in this engine.

"The gasoline is kept in a galvanized iron tank, which is usually placed outside the building and connection made from tank direct to the engine by one-fourth or three-eighth inch iron pipe. Thus you will note that in these engines the gasoline is closely imprisoned between solid iron walls from the time it is put in the tank until its product is exhausted into space through the escape pipe from the cylinder where the gasoline has been consumed.

"Should the engine accidentally become stopped, no matter from what cause, and the valves left open, not a particle of gasoline would escape, owing to the peculiar and ingenious construction of the gasoline inlet. As stated under the head of "governor," the consumption of gasoline is under perfect control of the governor, which allows gasoline to enter the cylinder only as called for by the load on the engine.

"With this engine there is no dangerous apparatus purporting to carbonize the air, or vaporize the gasoline, and which under certain conditions is known to fill with dangerous mixtures and explode frequently. Gasoline only becomes a dangerous commodity when mixed with the proper proportion of air. This mixture can only occur in these engines inside of the heavy iron cylinder of the engine. Absolute safety of these engines is secured by excluding all air from contact with gasoline until it is admitted to the engine in fluid form, where it suddenly commingles with a large volume of air and is ignited. Safety is also secured by providing against any possible leaks in the pipe between the tank and engine. The tank is generally placed outside the building, and any reasonable distance away from them, and when filled no fire or light, of course, should be near.

"Another feature is that changes in

## HAVE YOU ANY PATENTS

that you wish developed, any machine made, or castings of any kind? WE CAN DO IT.

### TOPEKA FOUNDRY,

Cor. Andrew Jackson and Second Sts.,

### TOPEKA, KAS.

the temperature do not affect the engine's running, as no so-called vaporizers, carburetors, or gas machines are used. Constant regulation of the air and gasoline is dispensed with, nor is there any gasoline remaining in the tank unfit for use.

"These engines are built in the following sizes:

2 actual horse-power, weight,	600
4 " " " "	1,625
5 1/2 " " " "	2,350
9 " " " "	2,900
12 " " " "	3,110
15 " " " "	3,650
22 " " " "	4,410
30 " " " "	5,900
38 " " " "	6,003
50 " " " "	7,600
100 " " " "	15,000

"Owing to the fact that no constant attendant is required, these engines can be left to run while the attendant looks after other business. One of these engines, located at Syracuse, operates twelve hours per day and consumes ten gallons of gasoline in the twelve hours. This engine raises 1,200,000 gallons of water eleven feet high, or enough water to irrigate successfully a section of land. One man attends to the above plant, runs the engine, takes care of the water and does all of the irrigating.

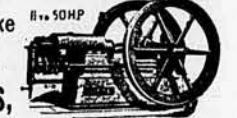
"Another feature relative to these engines is that when the pumping season is over, owing to the fact that these engines are all self-contained, they can be moved from place to place at the will of the operator and used for grinding feed, threshing, etc."

## WATER PIPE.

Our Hard Burned Vitrified and Glazed Clay Pipe is everlasting. With our Improved Joints this pipe will stand same pressure as iron and costs about one-fourth as much. Write for particulars.

W. S. DICKEY CLAY MFG. CO.,  
Makers of all kinds of Burned Clay Goods.  
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## WITTE GASOLINE ENGINE

Nothing Succeeds Like  **SUCCESS.**

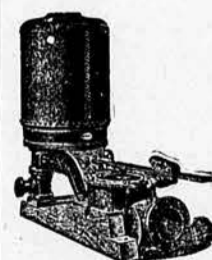
WITTE IRON WORKS, 

Kansas City, Mo. 1 CENT 1 HORSE 1 HOUR.

## CHEAP IRRIGATION BY AUTOMATIC RAMS

A COST OF LESS THAN

**25 CENTS PER ACRE PER YEAR GUARANTEED.**



This is the only known economical method of irrigation on a small scale, and a **RIFE RAM** will elevate water in any quantity to any height at any distance. Made in all sizes, for all purposes, and will deliver more water than any other ram under same conditions. Ill. Catalogue and estimates free. Rife's Hydraulic Engine Mfg. Co., ROANOKE, VA.

## DO YOU USE POWER?

WEBER Gasoline Engines run anything. For catalogue and testimonials address **Weber Gas and Gasoline Engine Co.,**

ALL RIGHT; you need CHEAP POWER. ONE CENT per horse power per HOUR is CHEAP! Economy in power, our motto. **459 Southwest Boulevard, KANSAS CITY, MO.**



## SUCCESSFUL POTATO-GROWING.

The apparent difference between the natural conditions on the plains of Kansas and at Greeley, Col., just at the edge of the plains, is not sufficient to account for the fact that Greeley farmers are growing rich raising potatoes, which they sell for use on Kansas farmers' tables. True, potatoes are irrigated at Greeley. But irrigation has not made a uniform success of potato-growing in western Kansas, where it has proven as beneficial as in Colorado to most crops. Considerable inquiry has been made as to the cause of the ill success with irrigated potatoes in Kansas. Finally a potato-grower has contributed to the Greeley Tribune an account of the early trials and ills of the potato-growers of that place and has shown the reason of their present success. He says:

"There was a time when the opinion generally prevailed among the Greeley farmers that very little water was needed in successful potato culture; no such idea prevails to any extent now. The original belief, or impression, arose from two sources. Old settlers who had grown potatoes on the alluvial margins of the rivers before upland irrigation was practiced to any extent in Colorado, had been in the habit of selecting choice places for this crop, where the under soil was always damp and little artificial irrigation was required; they told us potatoes needed very little water. Next, in a majority of our upland soils, in the raw, unmaured state, it was found that either early irrigation for potatoes or corn, or even later irrigation in excess, resulted in the first instance almost invariably in stunting the growth of the vine, which turned yellow and sickly after the application of the water; and in the second instance often checked instead of stimulated the growth of the tuber, and resulted in ill-formed potatoes and a small yield. Now we have ascertained that all this is the result of a condition of the soil; a cold mineral soil, almost destitute of decayed vegetable matter and having little soluble material in it for plant food, soddens down like a mass of plaster when water is applied, and plants, especially corn and potatoes, cannot assimilate much water to advantage when planted in such land. Constant stirring of the soil, of course, benefits the crop under such circumstances, but with a lean soil, whether of a sandy or clayey nature, no one could tell before we resorted to heavy manuring of our lands, whether a very early irrigation rendered necessary from the absence of the usual spring rains, would benefit or injure the potato crop. Experience and practice are entirely different now. As we began to apply manure in quantities to our lands in order, primarily, to increase their fertility and the resulting yield, we made the discovery: First, that the plants needed more water or the manure would burn them; and next that with richer soil and more plant food, rendered soluble and available with water and cultivation, both potatoes and corn could stand more water and earlier in the season, not only without injury but with material and perceptible benefit.

"So now we use twice the water we used to think either safe or necessary. At one time in the history of potato farming near Greeley, we, all of us, figured that if it became necessary to irrigate potatoes to bring them up. The chances were just about even between total failure if we did not put on the water and a practically total failure if we did. Now, the moment we get done planting, if the ground is too dry to bring the potatoes up, and if the prospect of copious rainfall is not extremely favorable, no one fears and very few hesitate to furrow out the ground and put on the water at once; and if the seed is in fair condition it is the uniform experience that the young plants will push themselves through the earth in an astonishingly short time, and grow with vigor after they come up.

"We used to believe that two irrigations were sufficient under ordinary circumstances, as to rainfall, to mature an average crop of potatoes. Three irrigations under the conditions of extreme drought were considered ample;

now we know better and we have not learned what we know about the matter from agricultural reports or treatises on irrigation from a scientific standpoint by civil engineers. All these sources of information have combined to instruct us in the pleasant but fictitious theory that as the country got older and the desert became subdued to cultivation, less water would be required; whereas the facts are that as the country gets older and improved methods of cultivation supersede the first primitive efforts; as the soil is enriched by liberal coatings of manure, or by the turning-under of masses of alfalfa, rich nitrogen and other plant foods, more and more water is required to produce the best results. We irrigate our potatoes from four to eight times now and we know from experience, and not from theory, that if we could run the water down our potato rows once every week from the time it first became necessary or advisable to apply the water, until the growth of both tuber and vine was completed, the results would be all the better; only provided that the soil is well drained and thoroughly enriched with manure or alfalfa and that cultivation is thorough."

## Wants Information on Potato-Raising.

EDITOR KANSAS FARMER:—One of your subscribers, also our local paper, tells me that Mr. Norton is writing up the history of the Early Kansas potato through your paper, and that he proposes to outline his own plan of work through the FARMER.

Your subscriber told me he had received the worth of his subscription in one of Mr. Norton's articles and expected to profit still more by them. I passed Mr. Norton's farm to-day and observed him plowing with a queer kind of a plow, that seemed to run in the ground and not turn over any soil, yet I could see that the soil was loosened up nicely. I have been acquainted with him for twenty years and know him to be a great specialist, that is, everything he undertakes he puts a lot of special study on, and, of course, can give us many points from his own experience. I was one of the judges at the Allen county fair and saw his display of vegetables and he fairly won the first premium on vegetables at both county fairs. Thus I can safely say he is the best vegetable-grower for the past year in the county.

I have been raising the Early Kansas potato for several years and shall go into the business largely after this, as with this potato I can make a success, while with all others potato-growing is a failure here.

Knowing Mr. Norton as I do, and living too far away and too busy a life to have much talk with him, I would like to read his articles on Early Kansas potato-growing, and enclosed please find \$1 for a subscription, and please date it back to the paper containing the first of his articles on the Early Kansas potato and mail me the back numbers. RICHARD GILLIAN.

Morantown, Kas.

## Practical Questions—Answers by a Practical Farmer.

EDITOR KANSAS FARMER:—Will you please answer the following questions:

What quantity of flaxseed is usually sown per acre? What share of the crop is usual where the ground is rented, when owner of ground furnishes seed and when the renter furnishes seed? Is flax more exhaustive to ground than other grain? If so, to what extent?

What is the relative value of ground wheat and shipstuff as a feed for horses? Some say there is more nutriment in bran or shipstuff, pound for pound, than in ground wheat.

What are the best varieties of plums for this climate? Are there any pears that are blight-proof? Which are the best varieties of cherries for this climate.

By answering these queries you will greatly oblige. J. S. CAMPBELL.

Anthony, Kas.

The above inquiries were referred to Mr. Amos Johnson, a successful farmer and orchardist of Barton county. It will be observed that the conditions in

Harper county resemble those in Barton county much more nearly than those of the eastern part of the State. Following is Mr. Johnson's reply:

EDITOR KANSAS FARMER:—The quantity of flaxseed usually sown per acre is one-half bushel. The renter, when furnishing the seed, should receive two-thirds of the crop; when the land-owner furnishes the seed, one-half. Flax is very exhaustive to the ground, even more so than millet or buckwheat.

The present value of ground wheat is 50 cents per bushel, the cost of grinding being 3 cents per bushel. According to my judgment one bushel of ground wheat (at present value) is equal to 50 cents worth of corn. I believe there is more nutriment in ground wheat than in bran or shipstuff; that is, if it is coarsely ground—there being less waste.

The best varieties of plums are as follows: Wild Goose, Weaver, Green Gage and Coe's Golden Drop. Cherries: Early Richmond and common Morello. As to blight-proof pears, I am unable to answer. A. JOHNSON.

Ellinwood, Kas.

## Improved Stock Breeders.

EDITOR KANSAS FARMER:—Your editorial suggestion to the stock-breeders of the State was in the right line. The value and importance of the annual meetings of the Kansas Improved Stock Breeders' Association cannot be over-estimated. Such meetings are the birthplaces of thousands of useful ideas and the graveyards of many fallacies. The Executive committee will soon have the program out, and it will be excellent. A new feature of the exercises will be letters from those breeders who cannot attend. Let them be brief and to the point. The committee will arrange and present them to the meeting. Those who prospered last year can afford to come, and those who did not may learn the secret. Let us have a great turn-out, a royal session. WM. B. SUTTON,

President.

## Appreciates Kansas Farmer.

EDITOR KANSAS FARMER:—I would like a dozen copies of the KANSAS FARMER of November 28. I wish to use them as sample copies to send to parties interested in the development of Kansas lands. I have been working for some time on an irrigation and colonization scheme, which, however, is not yet fully determined upon. I am also having 600 acres of land prepared for alfalfa, which will be planted in the spring. This land is near Burdett, and we will ultimately have from one to two thousand acres of alfalfa on our lands there.

I am very much interested in your paper, and send it every week to some of my Eastern clients, and it has received many compliments from them. JEROME SMITH.

Wichita, Kas., December 10.

## Osage Orange Hedge.

EDITOR KANSAS FARMER:—Please request some one who has practical knowledge in planting hedge for fence, to answer the following:

When shall I gather the Osage orange, and how shall I proceed to get the seed out of them? When and how long should the seed be soaked before planting? What is the best plan for fixing a hedge fence that needs a rod or more filled in occasionally?

Miltonvale, Kas. A. J. CULP.

## Alfalfa in Texas.

EDITOR KANSAS FARMER:—Will alfalfa grow in south part of Texas?

Hume, Mo. J. M. OLIVE.

Alfalfa does well in New Mexico and will doubtless succeed in Texas wherever the proper conditions of soil and moisture prevail.

So thorough is the excellence of Ayer's Hair Vigor that it can be used with benefit by any person, no matter what may be the condition of the hair, and, in every case, it occasions satisfaction and pleasure, in addition to the benefit which invariably comes from its use.

The Kansas Weekly Capital publishes more Kansas news than any other weekly paper. A free sample copy will be sent on application to THE TOPEKA CAPITAL CO., Topeka, Kas.

## Publishers' Paragraphs.

Farmers who are interested in market gardening can get a free sample copy of magazine devoted to that business by sending postal card request to the Market Garden, Box 524, Minneapolis, Minn.

Mr. Hoar, of Medicine Lodge, Kas., has just installed a Rife ram—advertised in the KANSAS FARMER—with which he will irrigate a fine farm on the Medicine river bottom. The entire plant, counting labor and all incidentals, cost only \$150, and water enough to irrigate 100 acres.

Every farmer in Kansas, and especially the breeders and stock-raisers, should have the greatest live stock journal in the world, the Breeder's Gazette, of Chicago, price \$2 a year. We make a special offer of it and the KANSAS FARMER, both papers for one year, for only \$2. Subscribe now through this office.

A CELEBRATED MOUNTAIN CLIMBER.—W. M. Conway, who recently reached a greater height than had ever before been attained by any mountain climber, has described his adventures "Among the Highest Himalayas" in an article which the Youth's Companion announces among many other attractions for the coming year.

IF YOU SEE IT IN THE SUN It's So.—We note in the pages of the Chicago Times a singular accession of energy and intelligence since it passed into the hands of its present owners. Some one has infused a new and vigorous life into the paper. It has come by one masterly bound to the very front rank, and there is that quality in it that never fails of recognition. Brains and character will not be denied and victory is certain to him who has the power.—New York Sun, November 28.

The first of a series of extraordinary historical Napoleon finds appears in McClure's for January, being a graphic account of the battle of Marengo and of the famous stand of the grenadiers of the Consular Guard, who, 500 in number, withstood the attack of the whole Austrian army and have ever since been called the "Wall of Granite." The story is told by one of the Consular Guard and has heretofore been unknown to Napoleonic scholars, and was discovered by Miss Tarbell during her exhaustive researches for writing her life of Napoleon.

A new book by a Kansas writer is always interesting to a Kansas reader. The latest of such works to come to our table is "Stories for Kansas Boys and Girls," by Mrs. C. S. Baker, of Topeka. The book contains a number of stories, sketches and snatches of verse intended for the juvenile mind, and our better half, who has read it carefully, says it will compare favorably with more pretentious works by Eastern authors and publishers. The book is printed handsomely by Crane & Co., of Topeka, and all the net proceeds of its sale are donated by the author to the Orphan's Home, in the Kansas capital. The sales ought to be large.

## Farmers!

Send your boys and girls to Bethany college, Lindsborg. From January 8 to April makes a convenient term. This splendid college has little red tape, but makes hard work and small extras popular. Twenty-five instructors. Eight departments. Just the school for the intelligent boys and girls from the farm. Over 400 attending now. Finest Music and Art school in the State. Strong normal, business and preparatory departments. Excellent classical college course. Write the President, Carl A. Swensson.

## Fine Poultry.

This may not be a perfect photograph, but it is intended to represent one of the fine premium turkeys at the recent Warrensburg (Mo.) fair. Mrs. F. W. Ives, of Knob Noster, Mo., is the owner, and also is the happy possessor of sixty other fine specimens of Mammoth Bronze turkeys. Write her for prices and description.

## GEARHART'S FAMILY KNITTER.

Knits a stocking heel and toe in ten minutes. Knits everything required in the household from homespun or factory wool or cotton yarns. Most practical knitter on the market. A child can operate it. STRONG, DURABLE, SIMPLE, RAPID. Satisfaction guaranteed. Agents wanted. For particulars and sample work, address: J. E. GEARHART, Clearfield, Pa.

Household Furniture \$10.60  
BIG THE 3 sold direct from the factory at only 10 per cent. above cost. We ship everything on approval, satisfaction guaranteed or money refunded. We save you the enormous profits of jobbers, wholesale and retail dealers. The Big Three Combination, consisting of BED, DRESSER AND COMMODE only \$10.60. Retail at \$20.00. Hardwood, finely finished. Thousands sold. CUT THIS OUT and write to-day for description and illustrations of our large furniture assortment. Address: OXFORD MFG. Co., Furniture Dept. T. 589. 939 TO 344 WABASH AVE., CHICAGO, ILL.

The Home Circle.

To Correspondents.  
The matter for the HOME CIRCLE is selected Wednesday of the week before the paper is printed. Manuscript received after that almost invariably goes over to the next week, unless it is very short and very good. Correspondents will govern themselves accordingly.

A LITTLE BOY'S WISH.

I wish that I was Santa Claus,  
Who looks so jolly and gay,  
With his pack of presents on his back  
To strew along the way.

Oh, how the children would love me,  
And watch with eyes so bright  
For the coming of my reindeer  
On the holy Christmas night.

And I'd not disappoint them;  
I would call at every door,  
And leave so many pretty things—  
I would not scorn the poor.

I would tell to them the story  
Of our Savior's humble birth;  
How he loved all children,  
How he blessed them while on earth.

Oh, don't I wish I was Santa Claus?  
A home to each should be given,  
And I'd pray that when we children die,  
To have Christmas up in Heaven.

Protection, Kas. EMMA J. SABIN.

MEMORIES.

Just a smile at twilight,  
Just a smile, no more—  
Yet it made my heart beat in my breast, love,  
As it never had before.

Just a word of welcome,  
Just a word, no more—  
Yet it brightened my life into gladness,  
As in the days of yore.

Just a true heart's love, dear,  
Just a love, no more—  
Yet it opened the gates of heav'n, sweetheart,  
And showed me the love in store.

Just a kiss at twilight,  
Just a kiss, no more—  
Yet it drew us closer together,  
Till our hearts could hold no more.

Just a ring of gold, dear,  
Just a ring, no more—  
Yet it bound me to you with fetters, love,  
Forever and evermore.

Just a little cherub,  
Just a child, no more—  
Yet it drew us still closer together,  
Till our hearts could hold no more.

Just a grave at evening,  
Just a grave, no more—  
Yet it held all on earth I cared for, love,  
And oh! but my heart was sore.

Just a lonely life, love,  
Just a life, no more—  
For you've crossed the river alone, sweetheart,  
And left me here on the shore.

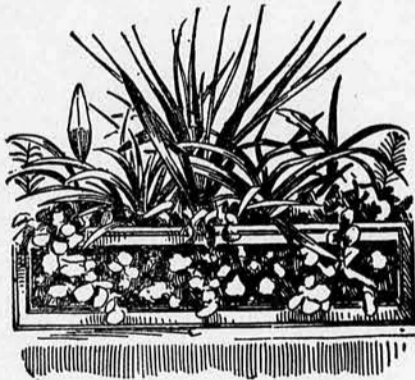
—Young America.

TASTY WINDOW BOX.

An Excellent Way of Adorning the Living Room of a Home.

One of the most satisfactory methods of adorning the inside of our houses is by the use of suitable plants, and this is an especially suitable season to remind our lady readers of that, when the winter season is not far off. The window offers a convenient spot for a box with choice plants, and will greatly assist the appearance of the room.

The beautiful box here shown is known as the "Minton tile window box," and is made of Minton tiles, decorated in yellow, blue and white, under heavy glaze; substantial wooden mountings, natural dark finish; the interior is lined with zinc. The size is



A HANDSOME WINDOW BOX.

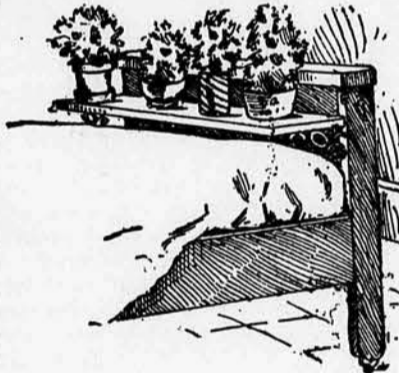
thirty-three inches long by nine inches wide and seven inches deep. The photograph was taken with plants in the box, and that helps to display its use. They are: One *Dracæna indivisa*, two *Dracæna terminalis*, two *Athercium vittatum* var., two *Cocos Weddelina*, two *Asparagus tenuissimus*, five *Pellionia pulchra*, the latter being the plant drooping down in front, and is extremely rich looking in contrast with the light colors of the box. This collection of plants, as is easily seen, makes an attractive box, and they are selected to withstand the temperature and peculiar atmospheric conditions of the ordinary living room, and would cost about \$4.00. For a fancy box, such as the Minton tile, we would not advise

very common or mean-looking plants, they would be out of place; but it is not necessary that one should be without a window box if he cannot afford or does not care to invest so much money in one as this would cost—the price is about \$5.00. With a saw, a hammer, a chisel, a few nails and lumber, a serviceable box can easily be made: Get one-inch planed pine boards, free from knots, and put them together so as to make a box of the same size as the one described; or any size in length and width to suit your window, and paint it any desired color. Bore six half-inch augur holes in the bottom at equal distances and the box is ready for the plants. If it is desired to have it a little more fancy in style, procure half-inch black walnut trimmings and tack them at top, bottom and ends, so as to make it look like a panel. A splendid decoration is oilcloth of a tile or other pattern, cut to size and fastened on with the black walnut trimmings. A few geraniums, heliotropes, sweet allyssum, begonias and tropæolums to droop over the edge will give a pretty effect. Such plants will grow easily, and can be procured at very little cost. A dozen plants should be enough, and any florist can supply them. If you have no soil, it would be better to get that also from the man who furnishes the plants. To give the collection a rich appearance it would be well to have one palm for the center of the box. The illustration is from a photograph kindly supplied by Messrs. P. Henderson & Co.—American Gardening.

AN INVALID'S GARDEN.

A Beautiful Way of Lightening the Lot of Our Sick Friends.

The old notion that growing plants in one's living and sleeping rooms were not conducive to good health seems to have exploded with so many other pet theories of "ye olden time." If the home holds some dear invalid whose weeks and months must be spent wearily in bed, let us hope that some of the freshness and brightness has crept into her room. Unless one has had the misfortune to lie in her place



INVALID'S FLOWER GARDEN.

and suffer her weariness and pain, perhaps one can hardly realize the comfort and relief she will gain from the few pots of flowers beside her or around her, but let us try the experiment, at all events. The illustration given here suggests a novel and beautiful way to give our invalid a "bright spot" in her long days of monotony and suffering. And it is so simple a way to do such a big missionary work! A broad shelf, polished and beveled, is secured to the inner side of the bed's foot-board and held firm and strong by pretty iron brackets at either end. Upon it are set the very prettiest, thriftiest plants, in the daintiest of pots and bowls, that the home greenhouse affords. From time to time they may be changed for others whose blossoms are just in their glory. The little shelf may thus be always full of the best and brightest. If desired, there may be two brackets for holding a single plant, on either side of the head-board, within easy reach of the invalid, who may take comfort in trimming off the dried leaves and caressing and petting them, a process that seems to find favor with plants as well as "other folks."—Webb Donnell, in American Agriculturist.

Something Long Desired.

Women have been waiting for something which would hold their hats on in lieu of the spiking pin. This seems to have arrived in a little English invention, which is an ingenious arrangement of two curved pins that, sewed into the back of the hat, grip the hair in a way that defies any wind to loosen.



FORTY MILLION CAKES YEARLY.

THE PROCTER & GAMBLE CO., CHICAGO.

ABOUT BLACKHEADS.

Almost Invariably They Are an Indication of General Debility.

Blackheads, or comedo, as it is called, is a disorder of the sweat-glands by which they become distended with yellowish or whitish matter. In the center of the elevations, which are only of pinhead size, are to be seen the blackish points which give the disease its name.

The spots are usually numerous, and make their appearance mostly on the face and neck. They run a peculiarly sluggish course, and by their presence the skin acquires a thick, muddy complexion.

Blackheads are almost invariably an indication of general debility, as they are a sign of a badly working skin. Their appearance is usually accompanied by marked dyspepsia and constipation.

The treatment of blackheads is identical with that for toning up the system in general. Clean out the bowels, sharpen the appetite, enrich the blood, and the tendency to the trouble will be removed or lessened. Saline aperient waters should be drunk freely and every attention paid to the diet.

As a local treatment the skin should have frequent applications of water as hot as can be comfortably borne, together with plenty of castile soap and friction. The little black cones may be easily expelled by means of a watch-key. Stimulating ointments and washes should be used, especially those containing sulphur, as this substance is not only a good skin tonic, but is specially useful in the disorder of which we are speaking.

A lotion containing equal parts of sulphur, glycerine, carbonate of potash and alcohol, is a valuable remedy, as it is cleansing and soothing.

Sometimes the swollen sweat-gland contains a small curled hair, sometimes a parasite known as *Demodex folliculorum*, which, however, is harmless and in no way the cause of the disease.

Attention must of course be directed to any disease of the stomach or bowels that may exist.—Youth's Companion.

PRETTY CHINA CLOSET.

How to Utilize the Corner of a Room to Display Fine Ware.

As china has now developed into an art the china closet has become a part of the furnishing of the dining-room. At each corner in well-appointed houses these quaint cupboards have a wonderful, picturesque effect, and add much to the decorations of this room. Of wood, the curly birch or ash with brass furnishings are considered by artistic people to be the best. In one house where some artists live the lower shelves of these cupboards, which are closed by a wooden door, have a quaint motto in brass, which adds to their clever ornamentation. And the glass part of these good, useful and delightful decorative bits extends almost to the broad frieze of the wall paper.

Of china, the Copenhagen ware is the most expensive. It is a wonderful blue, which is of a slate-color effect. The brown Doulton pitcher, with its queer lettering, its designs of odd figures and its flowery wreaths in tones of creams, are great for the pretty china closet.

The chocolate pot, which is of every design and shape, can be purchased for from five dollars to the low price of one dollar and fifty cents, and yet every one is a model of the chinemaker's skill. As a good background for this decorative affair two or three good fish or dessert plates will show off admirably well if placed securely by a fair-sized tack against the back of the shelf. In these dainty closets the cracker jar and cheese plate should be always on hand.

At a supper given in an artistic dining-room not long ago the china closet was a symphony in blue. The nankeen china being the scheme, every piece from the glass front presented to the eye a series of Chinese pictures, with their pagoda effects and peculiar forms so distinct with these people.

If the china closet is a low one, on its top there should be a stunning vase, either in Mexican or South American pottery, or a fine piece of Japanese rockwood will do excellent duty. These colors of terra cotta or browns are ad-



A CORNER CHINA CLOSET.

mirably suited for a high place, and are in accord with all the china within the shelves.

Many of these closets have silk curtains fastened by ends to a brass rod. Of the new silks, the variety is endless. There are delicate greens of a cashmere pattern which, for this purpose, is a poem in silk. Then there are lace effects; one stripe of it in apple green, with an alternative stripe in lace, the crinkled, variegated material being the most gorgeous. But any simple drapery will do if the curtain design is wanted.

To secure a fine decorative bit—all tones in china for a closet should be complementary—use pink very sparingly, red but seldom. Delicate tints in which gilt has a good share is the proper caper for that pretty china closet. Cut glass always is a fine scheme in small pieces, which, if rightly placed, will add every time to this cupboard and enhance its brilliancy.—St. Louis Republic.

If you have a troublesome cough, don't keep nibbling sweets, and so ruin your appetite. A dose or two of Ayer's Cherry Pectoral will do you more good than pounds of candy, and assist rather than impair your digestion. Always keep this medicine in your house.

Interesting circulars sent to farmers. Send name to Bureau of Immigration, Spokane, Wash.

INCORPORATED OCTOBER 29, 1894.

LOCATION, 1103-1105 NORTH FOURTH AVENUE.

HOME OF REDEEMING LOVE, WICHITA, KANSAS.

Object.—To provide a home for penitent fallen women, and to rescue them from lives of shame; to reclaim, educate and instruct them in industrial pursuits, and to restore them, when possible, unto their homes and parents. BENEVOLENT FRIENDS, this institution is non-sectarian and non-salaried—each worker freely doing her part to "rescue the perishing, lift up the fallen and tell them of Jesus, the mighty to save." God is blessing the work and good is being done. Now, we want you to "help just a little" and enable us to do still greater good. The erring daughters must be reclaimed—they are more often sinned against than sinning. The Savior said, "Neither do I condemn thee; go in peace and sin no more." Address REV. LYDIA A. NEWBERRY, WICHITA, KAS.

## The Young Folks.

### TALE OF A BAD LITTLE BOY.



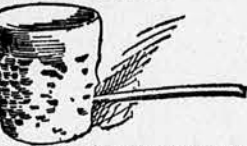
There was once a pretty urchin—  
Hair and eyes black as jet—  
But he squandered all his pennies  
On the nasty cigarette.



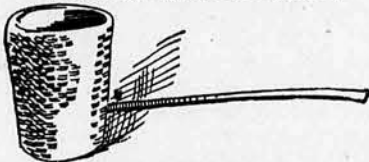
Yea, he smoked them by the dozen,  
And he smoked them by the score  
Till his face was sadly altered,  
But he only smoked the more.



And his father stormed and threatened,  
And his mother pleaded, yet  
He just shook his head and fumbled  
For another cigarette.



And his eyes grew dim and misty,  
And his features, once so sweet,  
Changed so people failed to know him  
When they met him on the street.



Till at last he grew the color  
Of a walnut overripe,  
And his mother couldn't tell him  
From a corn-cob pipe.  
—S. Q. Lapius, in Chicago Inter Ocean.

### THE SHARK'S JAWS.

Some of the Voracious Creatures Have Six Rows of Teeth.

The jaw of a shark is a perfect study. In some species the adult members have six rows of teeth in each jaw, each tooth being pointed, the points being directed backwards, so as to form a veritable barb. These teeth, which in their normal state lie flat against the jaw, are erectile at will, and when the animal darts on his prey they start on end in the same manner that a cat's claws are protruded from their sheath. When a shark seizes his prey he is forced to bolt it, whether willing or not, for the arrangement of the teeth will not allow him to disgorge his food, which can only pass inwards to the stomach. His position in the water is also more or less awkward, and compels him to be quick at his meal. He approaches the object he intends to swallow, and just before reaching it suddenly turns on his side and back and then grabs at his prey from that position. This is necessary because his mouth is too far under his head. When a shark is killed and dissected, the contents of the stomach are often of a most miscellaneous character. One which was opened in the presence of the writer contained, among other articles, a horse's mane and several empty bottles. The latter articles had probably been thrown overboard from some vessel in the harbor, and were presumably seized and swallowed by the rapacious creature before he had found out just what they were.—Harper's Young People.

### THE CUNNING 'POSSUM.

An Interesting Creature Which Has Some Very Peculiar Habits.

The opossum is an animal found only in America, and mostly in the southern states, where it is held in high esteem by the colored people, who delight in hunting it and eating the flesh, which is like young pig. They are cunning animals, making fierce resistance to capture until they are overcome, when they will lie still and pretend to be

dead, hence the phrase "playing 'possum." The call for a 'possum hunt is a great event in the locality where it occurs. The negroes volunteer their services, and the dogs are wild with the prospect of "treating a 'possum." Moonlight nights are considered the best for the sport, and the hour at which the hunting party starts out is between eleven and twelve, when the opossum has left the trees and started out to forage for food. The dogs are soon on the scent, and if the animal is in the tree will remain barking at the foot, but in case it is in the open will go scurrying after it, bringing it in for the hunters to shoot. Mongrels and Scotch terriers are trained to this work, and a gamy terrier will kill an animal twice as big as himself.

'Possums can be found, in the winter season, in all the large northern markets as game, and it is quite the fashion to entertain guests with a baked 'possum, dressed with highly seasoned ingredients. The favor with which the southern darky looks upon this favorite dish may be illustrated by the story of the two darkies who were riding along the highway on a pair of mules.

"Dey's gwine ter hab roast 'poss'm, der old woman an' de chillun is, yum, yum."

"Gosh-er-mitey," answered the other one, solemnly showing the whites of his eyes.



"Yah—roast 'poss'm, an' taters an' gravy, an'—"

"Hole de light yar! De dog done tread, I knowed dey's almos' o'ot him, De way dey barked. What's dat you seed? Out on which lim? Yes, sah, dat's him, We sartin suah is got him."

It turned out in this case to be a farmer's cat, a species of 'possum which is not infrequently captured after an hour of inglorious sport. The opossum is a very harmless little animal and has many things to recommend it, for, although not considered a great delicacy, its flesh is very palatable, and its fur, which the Indians formerly used in many ways, enters more largely into the industries of commerce than is generally known. Its peculiar method of rearing its young in bilateral pockets, contrived cunningly by nature in its own fur, commends it to the scientific inquirer as an interesting subject of investigation. It has a wonderfully tenacious hold on life, for although it may be pounded with sticks and stones until every bone is dislocated, it will crawl away if left unmolested, and soon resume its wonted habits.

There seems to be a disposition among naturalists to slight this clean and wholesome rodent with the prehensile habit, for very little is said about it in the literature of animals.—Detroit Free Press.

### Two Brave Girls.

Here is the record of two brave girls: A fourteen-year-old girl at Beecher Bay, B. C., killed with a Winchester the other day a big panther which her dog had treed; and another girl, seventeen years old, of Benton, Ore., killed a cougar which was making off with a young pig.

Highest of all in Leavening Power.—Latest U. S. Gov't Report.

# Royal Baking Powder

## ABSOLUTELY PURE

### WAYS OF SPIDERS.

A Giant Insect That Weaves a Wonderful Golden Web.

Among the great web-spinning spiders is the Halaba, of Madagascar, which spins shining golden-yellow threads strong enough to bear the weight of one of those cork helmets such as travelers wear in warm countries. They have woman's suffrage in the Halaba family, where the female considerably outweighs the male and is correspondingly "bossy." She grows to the quite remarkable length of five and one-half inches, while he, poor fellow, never gets beyond the quite insignificant dimensions of an inch and a half. In consequence when she, in all the glory of her shining gold cuirass, with a silvery down on it, spreads her five red, black-tipped legs in the midst of her shining golden web, he has to keep at a respectful distance and seek the seclusion of his club, for he has no rights in that web which his more mighty spouse is bound to respect. She is a very industrious spinner, and I have no doubt that the airs of superiority she takes over her husband are largely due to the fact that she realizes she is the breadwinner for the family. She has been known to spin in a little less than a week 3,291 yards. For over a hundred and fifty years men have tried to utilize the spider's silk for weaving fabrics with but discouraging success. Le Bon, about the beginning of the last century, succeeded in making gloves of it, and Louis XIV. had a pair of hose made of the thread. The web of the Halaba and one or two American spiders have led Dr. Wilder, of Cornell university, to hope that he might still make spiders' webs commercially valuable. The thread is quite as long as that of the silkworm, one species in Jamaica spinning a thread sometimes three miles long, but the chief difficulty lies in obtaining a long thread unbroken.—Isabel D. McKee, in St. Louis Republic.

### JEPHTHA 'THE TERRIER.

Once He Ran Away from Home, But Was Glad to Get Back.

There is a little dog in Brooklyn who had a peculiar experience recently—an experience that he will not care to have again. This small bow-wow is called Jephtha, always shortened to Jeppy. He is a silver Skye terrier, and when his hair is nicely brushed out he looks like an animated ball of cotton. A romp on the street is his chief delight, and he will become friendly to anyone who will open the door wide enough for him to escape from the house.

One day Jeppy's mistress went shopping and when she returned her doggy, like Old Mother Hubbard's, was gone. The favorite hiding places beloved by Jeppy were looked into—under the lounge in the parlor, beneath the tubs in the kitchen, and the sunny window ledge—but he was not to be found. While his mistress was out a messenger had brought a number of parcels from one of the big dry goods stores, and so, when the door was ajar, this naughty cur slipped out to his favorite playground. When the messenger left the house he noticed the frisky little fellow and patted him on his shaggy head. That seemed to assure the dog that all was right and he followed the boy all day.

Joppy had a jolly good time, but he got very tired. The boy took him home and tied him to a clothes post in the back yard. It was dark and Jep was not used to that sort of treatment. He had always slept on the table in the warmth and glow of the evening lamp at home, so he whined in pity of himself. Then the boy's father came out and kicked the shaggy runaway, but he only yelped the louder. Then the

neighbors threw lumps of coal and other things at him. The next morning the boys noticed an advertisement for a lost dog, and it tallied with Jep. The boy led the dog home, but the tiny canine was not the ball of cotton that he had been the previous morning. He limped on three legs and presented a very dejected appearance. It was several days before he could be coaxed to



JEPHTHA.

do any of his tricks, and he is very clever in this way. If his mistress spells O—U—T, he will run to the door and look around to see who is going. He plays dead dog, but comes back to life very quickly at the word of command. He loves a game of hunt the handkerchief, tucking his nose into pockets in his eagerness to find it. He can beg like a blind man's dog and walk forward and backward on his hind paws. Jep is very fond of ice cream. Indeed, he is an intelligent little fellow and has never tried to run away since his experience of a night.

"BROWN'S BRONCHIAL TROCHES" are a simple and convenient remedy for Bronchial Affections and Coughs. Carry them in your pocket. Sold only in boxes.

I have been a constant sufferer, and at times in great agony of pain with my eyes for seven years, from defective vision and neuralgia of the optic nerves. I have had years of medical treatment, and have had several pairs of glasses fitted, but all to no avail until March 17, 1892. Mr. Chas. Bennett, optician, 718 Kansas avenue, Topeka, fitted me with glasses which I have worn constantly with perfect ease, and my eyes have grown so much stronger that I can now use them constantly. To those who are suffering from defective vision I can cheerfully recommend Mr. Bennett as an optician who thoroughly understands his business. Very respectfully.

L. C. HOLADAY,  
400½ Kansas Avenue.

### Homes for the Homeless.

The opening of two Indian reservations in northeastern Utah to settlers opens up over three and one-half million acres of fine agricultural and stock-raising land for home-seekers.

The Uintah and Uncompahgre reservations are reached by the only direct route, the Union Pacific system, via Echo and Park City. E. L. LOMAX, G. P. & T. A., U. P. system, Omaha, Neb.

### Pond's Business College,

Topeka, offers to give farmers' boys three months' tuition this winter for only \$15, and then next year, if they wish to come again and finish the course, they can do so for only \$15 more. Now, boys, here is your chance.

For a thorough business and shorthand course attend the Wichita Commercial College. Y. M. C. A. building.

### PIERRE S. BROWN'S School of Business & Shorthand

We make specialties of rapid calculating and simple and concise methods of recording and posting as they are used in actual business. Commercial course, six months, \$30; Shorthand and Typewriting, six months, \$40; English course, three months, \$10. Bayard Bld., 1212-14 Main St., Kansas City, Mo.

# KANSAS FARMER.

ESTABLISHED IN 1863.

Published Every Wednesday by the  
**KANSAS FARMER COMPANY.**

OFFICE:  
No. 116 West Sixth Street.

**SUBSCRIPTION PRICE: ONE DOLLAR A YEAR.**

An extra copy free fifty-two weeks for a club of six, at \$1.00 each.

Address **KANSAS FARMER CO.,  
Topeka, Kansas.**

### ADVERTISING RATES.

Display advertising 15 cents per line, agate, (fourteen lines to the inch).  
Special reading notices, 25 cents per line.  
Business cards or miscellaneous advertisements will be received from reliable advertisers at the rate of \$5.00 per line for one year.  
Annual cards in the Breeders' Directory, consisting of four lines or less, for \$15.00 per year, including a copy of the KANSAS FARMER free.  
Electros must have metal base.  
Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.  
To insure prompt publication of an advertisement, send the cash with the order, however monthly or quarterly payments may be arranged by parties who are well known to the publishers or when acceptable references are given.  
All advertising intended for the current week should reach this office not later than Monday.  
Every advertiser will receive a copy of the paper free during the publication of the advertisement.  
Address all orders  
**KANSAS FARMER CO., Topeka, Kas.**

May your Christmas have been merry and your New Year a happy one.

Every farmer who desires to improve financially and in his vocation from this time on is cordially invited to subscribe for the old reliable KANSAS FARMER, a medium which will help do it.

The Kansas State Poultry Association will hold its sixth annual exhibition at 424 Kansas avenue, January 7 to 12, 1895. Send for premium lists to D. A. Wise, Secretary, 707 East Tenth street, Topeka, Kas.

In laying plans for 1895 get fully informed as to the crops and methods of procedure which yield good profits to the farmer. Remaining in the old ruts because it takes an effort to get out does not denote a live and wide-awake farmer.

The KANSAS FARMER would appreciate a holiday present from each of its subscribers in the shape of a new subscriber for the year 1895. This would exactly double the present circulation of the "old reliable," and it need scarcely be suggested, enable the publishers to make this, the best agricultural paper, still better.

About a year ago several prosperous farmers in providing reading for the year just closed sent a list of what they wanted to the KANSAS FARMER and saved money by reason of our low clubbing rates. One man sent in \$27, as the writer remembers, and saved nearly \$10 on his year's reading. That farmer's family had never a chance to get lonesome in 1894.

The Montana Stockman and Farmer, in a half-column editorial review of the recent reports on "Feeding Wheat to Farm Animals" and "Alfalfa-Growing" insists that "the Kansas State Board of Agriculture is the most progressive and up-to-date agricultural body in the United States." Concessions to the same effect are made from other and older States as well as from Montana, and would seem to confirm the possibilities for good work by such an institution in its legitimate lines when kept aloof from politics.

### IMPROVED STOCK BREEDERS' ASSOCIATION—ANNUAL MEETING.

The Improved Stock Breeders' Association will hold its annual meeting at Topeka on Tuesday and Wednesday, January 8 and 9. The breeders are expected in great numbers and the Secretary requests that any breeder who cannot attend at least write a letter to show that he is still in the ring and to contribute to the interest of the meeting and the advancement of improved stock breeding in Kansas.

### END OF THE YEAR.

"Established in 1863" is the brief legend which tells that for thirty-two years the KANSAS FARMER has been in the field as the helper, friend, counselor and representative of the men and women who have done most to develop the material resources of Kansas and to make it possible for her to become a great State. The bound files of the KANSAS FARMER on the shelves of the office are volumes without which, or their duplicates in the archives of the State Historical Society, no complete history of Kansas could be written. These volumes tell a varied story. They tell of years of superabundance, of productiveness which has startled the world and broken down the markets for the leading cereals. They pass as lightly as possible, consistent with truthfulness, over the effects of drought and disaster; but these, too, are recorded, though not without at the same time mentioning the bright outlook for another crop or for another year.

Great social and political changes in the State have also their photographs accurately shown in the columns of these files. Of these revolutions there have been more than one in these thirty-two years. During the last year the KANSAS FARMER has witnessed an object lesson which is significant of changes now in progress in the thought of the farmers of the State. It will be remembered that early in the year appeared a Senate report on "Agricultural Depression." This was commended for its fairness, accuracy and comprehensiveness by prominent representatives of all parties and of diverse interests. It was written by Senator W. A. Peffer, and its showings produced, for the time, a sensation. The KANSAS FARMER had some inquiries for copies and obtained a supply for distribution to those who should ask for it. Late in the season there appeared from the office of the Secretary of Kansas State Board of Agriculture a report on "Feeding Wheat to Farm Animals," and still more recently another on "Alfalfa-Growing." Of these the KANSAS FARMER also procured supplies and placed them on the same shelf with the report on "Agricultural Depression." The piles of the reports on "Wheat-Feeding" and "Alfalfa-Growing" disappeared almost in a day, and the demand continues after the exhaustion of all available supplies, while there is yet on the shelf a goodly pile of "Agricultural Depression."

The inference is that farmers are turning their attention more to the matters which make for individual prosperity than to those of the commonweal. It will be unfortunate if the best and most unprejudiced thinkers on questions of economic science abandon its study, but as in other avocations it is necessary to prosperity that the farmer give his strongest and best thought to his individual affairs. Indeed, if every farmer shall be able, by adopting the best methods, to attain individual prosperity, the problem of the commonweal will have been solved so far as agriculture is concerned. Again, it is a notable fact that in public affairs the influence of the man who is prosperous is several times greater than that of the unfortunate or despairing. Thus for the common good of agriculture it is better that every man attend first and most to the things which make for individual prosperity, that he read and study and become informed so as to add to his individual power to produce those things for which the markets pay the best remuneration, and he will find that the smaller effort devoted to political and economic questions will produce greater results.

It has doubtless been observed that the KANSAS FARMER has led in this line of thought. It is believed that the interests of its readers will be best served by a still more pronounced attention to matters of practical agriculture and by devoting even less attention than ever before to questions of general discussion. Certainly the FARMER will avoid partisan politics, leaving this to the able newspapers of the several parties.

The prospects for agricultural prosperity in Kansas are certainly as bright

as those of any other part of the world. Kansas is beginning to learn the value of resources which have long been lightly regarded and which are here pre-eminently abundant. The receding waves of population will quickly turn, and, with wise management, with diligent study of the best methods of utilizing our opportunities, with care as to the prosperity of the farmer now within our borders, rather than attempts to induce some one with more money to come in and buy him out, there need never be another ebb tide, because there need be no want for him who will work intelligently.

To the promotion of this prosperity, the prosperity of the farmers who are farming the lands of Kansas and of those who will join them, the KANSAS FARMER pledges its best efforts and bespeaks for its readers for 1895 a prosperous and a happy year.

### THE SPEAKERSHIP.

The office of Speaker of the House of Representatives of the Incoming Legislature is one of greater influence on the laws to be enacted than that of any other official, with the possible exception of the Lieutenant Governor, and is not surpassed by his. In practical law-making by modern methods the work is very largely done by committees. These committees of the House are appointed by the Speaker, who, by his selections of the chairmen and members of the many committees, can predetermine the moulding influences of legislation.

The KANSAS FARMER, as the spokesman and representative of the one interest in Kansas in which are directly concerned more people and in which is invested more capital than in all others in the State, has a few words to say on the subject of the selection of Speaker. It is to be hoped that the legislator on whom this honor shall fall may be man enough to rise above the petty squabbles of politicians and may remember that their persistently-pressed personal interests, their scramble for factional and partisan advantages, are insignificant in comparison with the interests of the people of the great State of Kansas. It is not to be expected that any member, elected as all have been, at the end of a fierce political fight, will fail to recognize it as an obligation solemnly imposed to promote the interests of the party which elected him. But the statesman who shall be elected to the Speakership should be able to see that the perpetuity of his party in the majority depends more upon the way in which it takes care of the great interests of the State than on the skill with which it satisfies the clamor of place-hunters and schemers.

The KANSAS FARMER has not the honor of an acquaintance with all of the gentlemen who have been named as candidates for the Speakership, and has no charges to make against any of them. But it has heard mentioned in this connection Judge W. B. Sutton, of Russell county, whose ability as a parliamentarian, whose grasp of public interests, whose interests in common with the greatest industry of Kansas, whose ability to comprehend more than personal or partisan advantages, more than schemes that will be presented by the schemers, and to see what the legislators can and wisely may do now for the present and prospective benefit of the people, make him a candidate whom to have supported will be to promote the best interests of the State. Mr. Sutton is a farmer and stock-grower. He is President of the Kansas Improved Stock Breeders' Association, and his election to the Speakership would be hailed as a recognition of the fact that the day has come when Kansas legislators turn their attention to the promotion of the prosperity of the people rather than to the promotion of the schemes of the politicians of Kansas.

The cheapest and best way to break up monotony and to make life and home enjoyable is to provide plenty of good reading. Take the county paper; take a State political paper; take the KANSAS FARMER; take a good monthly magazine—take these, if no more.

### REGULATE THE PUBLIC PRINTING.

Some readers of the KANSAS FARMER send their requests for the official publications of the State Board of Agriculture to this office, instead of directly to the Secretary. It so happened, one day last week, that we had eight requests from subscribers in Missouri for copies of the bulletins on the "Russian Thistle," "Feeding Wheat to Farm Animals," and on "Alfalfa-Growing." The editor communicated to Secretary Coburn these requests by telephone. His reply was that much as he should like to accommodate our Missouri friends it would be impossible to do so, and as a clincher added that 1,000 similar requests from Kansas farmers now on file cannot be responded to because of the exhaustion of the editions. We suggested to the Secretary that he must either print less valuable reports or get larger appropriations for printing them.

It has been mentioned in these columns that there are no funds available to pay for printing the biennial report of the State Board of Agriculture, and none to pay the postage on the books if they were printed. The fact is that the printing appropriation has been parcelled out and it is found that none is left for printing and distributing the report which does more than all others to enable Kansans to provide the wherewith to pay any of the expenses of the State government.

These circumstances have led to an inquiry as to what has been done with the printing appropriation for the current year. Nothing like an exhaustive inquiry as to its disposition was made, but enough was discovered to show that some wholesome regulation, either legislative or otherwise, is necessary as to the use of this appropriation. Thus it appears that the Labor Bureau has recently had printed a report containing 824 pages, most of which are filled with farm statistics. These embrace a map of each county in the State and voluminous tabular work, the subject matter of which one would expect to find in an agricultural report. The KANSAS FARMER has no issue with the Labor Bureau and recognizes the importance of efficient work and full reports covering the ground belonging to such bureau. But no argument is necessary to show the absurdity and the extravagance of a duplication by such bureau of work which under the law and the custom in this State belongs to the State Board of Agriculture. Possibly nobody is to blame because some thousands of dollars of the State's money has been expended in printing many expensive agricultural tables in a small edition of the Labor Commissioner's report, where no farmer would ever think of looking for them, even if there were copies enough to amount to anything in the distribution. But it is a matter which certainly should be carefully looked after by the Legislature to see that this expensive work shall not in the future be duplicated; that it shall be published from the proper department, and that enough copies be made so that the farmers who farm can get them.

### DATES OF FARMERS' INSTITUTES.

Institutes have been assigned to be attended by professors of the Agricultural college, as follows:

Stockton, Rooks county, January 31 and February 1, Dr. Mayo and Prof. Will.

Hiawatha, Brown county, January 24, 25 and 26, Prof. Graham and Prof. Georgeson.

Gardner, Johnson county, January 17 and 18, Prof. Walters and Prof. Fail-ler.

Garden City, Finney county, January 29, 30 and 31, Prof. Mason.

During December and January many of our readers in renewing their subscriptions desire also to send for other periodicals and get them at a combination rate. If such will send us a postal card, asking for price on a given list of papers, we will be pleased to answer, and can furnish subscription to any periodical published in America, even if it is not in our regular clubbing list as advertised in our supplement.

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## The Poultry Yard

### CHEAP POULTRY HOUSE.

Just the Thing for a Small Flock of Laying Hens.

A building for wintering a flock of laying hens, as shown in the accompanying illustrations from sketches by J. W. Caughy, will accommodate fifty hens. The building (Fig. 1) is six feet high by thirty feet long and twenty feet wide, the space for laying and roosting being separated by a wire netting par-

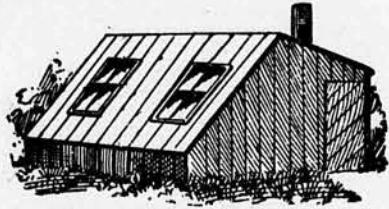


FIG. 1.—POULTRY HOUSE.

tion, where the feed and heater is located. A farmer's wife will find that a small building of this kind, costing not over twenty-five dollars, will meet her home needs and be handy to her kitchen door in cold weather when the barn is a long distance away. The

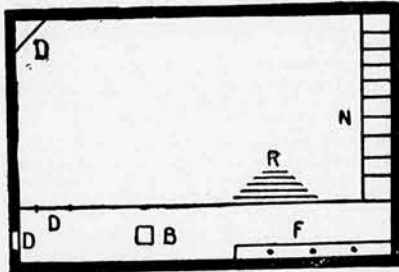


FIG. 2.—GROUND PLAN OF POULTRY HOUSE.

ground plan (Fig. 2) shows the arrangement, which is very simple. The nest boxes N, the dust box A, the roost R, the doors D, the heater B, and the feedbox F, are shown in the diagram. This house is practical and cheap. The roof is covered with tar or felt paper, to shut out the rain and snow.

### FATTENING POULTRY.

Some Timely Hints from the Columns of an English Paper.

Many persons who keep fowls have no idea whatever how to proceed if they want to fatten their birds, says Mark Lane Express. A dim idea pervades their minds that they will flourish and lay on flesh if they are confined altogether in a small yard or shed, in which they can huddle up in the damp and filth, and eat to their fill of the food which is periodically scattered among them. But this is entirely opposed to the experience of practical and experienced feeders. Old birds should not be fattened for market if it can possibly be avoided, as they rarely pay for the time, trouble and outlay of money; secondly, the young birds of either sex should be separated from each other at a very early age. It is a great mistake, too, to subject fowls to a very extended period of fattening, as after they are kept in close quarters for a long period many birds go off their feed and lose flesh rapidly. About three weeks is a fair period to estimate for putting the final touches on their condition, but the experience of a practical feeder will inform him when each bird is "ripe." It is best at this time to confine each bird by itself in a narrow coop boarded, specially made for the purpose, and usually forming one of a long row of six or seven, or even more, of such receptacles, in which he cannot turn round, but can only sit still, eat and meditate in quiet. They should be fed in troughs regularly and liberally, and the vessels should be removed as soon as each bird has stopped feeding. The fattening pens should be kept in a shed by themselves, away from other birds, and should be provided with a blind, so that the apartment can be darkened after each meal, the birds being thus left to digest their food and lay on flesh in peace. Sweet skim milk is preferable to water for their consumption, and soft food is far more satisfactory in its results than grain. Some people cram their birds artificially with thick gruel, which is forced into the crops by a tube, though the practice is too complicated for an ordinary establishment.

### GEESE FOR MARKET.

A Branch of Poultry Raising Which is Not Yet Overdone.

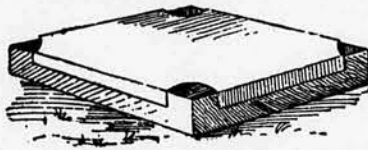
If not as popular as the turkey, the juicy meat of the goose commends it to a large class of buyers, and the market is seldom stocked with choice ones. It is safe to say that less improvement is made with the flocks of geese than with other kinds of poultry, and inbreeding is very common. Geese of the Toulouse or Embden breeds will weigh 25 pounds or more alive, and can be easily kept on any field that affords a good range, as geese subsist mostly on grass. Improvement should cost but very little, as geese live a great many years, and the same old pairs will bring out goslings year after year. It will be an advantage for farmers to use pure-bred ganders, and thus increase the size, which will not only add more weight, but increase the price per pound in market.

The finest flock of geese we have ever seen in Minnesota was on the farm of Philip Dressell, in Le Sueur county. They were of the Toulouse breed. Mrs. Dressell said they would yield an average of a pound of feathers a year, were easily raised, could be kept in a yard or pasture with an ordinary fence, and when full grown would dress from 15 to 20 pounds each. Mother Dressell said she did not raise them to sell, but for the purpose of supplying each new grandchild with a feather bed. Here is a branch of industry that is not overdone—a field of enterprise where many might find lucrative employment. There is a good demand for live geese feathers, and no immediate danger of glutting the market.

### SIMPLE DRINKING TANK.

One or More Should Be Made by Every Poultry Farmer.

The illustration of a drinking tank is from Mr. M. K. Barnum, Nebraska. It is simple, cheap and easily cleaned. It is a tin box about two inches deep and a foot square, leaving a detachable cover, with the corners of the cover cut away to permit the chicks to drink. The portions cut out may be small, so as to prevent chicks from getting in the water, but with such a shallow tank they cannot drown at all events. The cover also keeps dirt out and pre-



DRINKING TANK.

vents evaporation of the water. Mr. Barnum states that there is no patent on it, and he sends it as a gift to our readers. A larger and deeper tank on the same design may be used for fowls. The plan may also be adapted to a tight wooden box if desired.

### Winter Quarters for Poultry.

The quarters must be warm, but more especially dry. Dampness is more damaging than cold, and roup may easily be caused by a slight crack or crevice in the wall, and a leaky roof will cause disease whether the birds get wet or not. It is not necessary for the fowls to become wet and to feel the effects of dampness. A damp floor or wall causes the air in the house to be chilly and disagreeable, and the birds draw up and shiver in the corners. The temperature need not be high, about fifty degrees above zero is warm enough. Even forty degrees is not too cold. What is desired is not to have the house cold enough to freeze the combs.—Prairie Farmer.

### How to Prevent Chicken Cholera.

This is the great scourge that annually devastates the flocks and renders poultry-raising almost an impossibility in some parts of the country. It is contagious, but is fostered and encouraged by filth. The symptoms are greenish droppings, great and intense thirst, a nervous, anxious expression, and general prostration. Burn all the bodies, thoroughly clean up and disinfect the premises. As a preventive of cholera, feed, twice a week, cornmeal dough, the water for mixing the dough being prepared by adding a teaspoonful of carbolic acid to each quart of water. Keep the drinking-water clean and change it frequently.—Prairie Farmer.



# TENNYSON

Among Children.

Theodore Watts, the well-known critic of the London Athenæum, was one of the few men admitted to the friendship of the poet laureate. In

## The Youth's Companion

For 1895

he will describe characteristics of the poet generally unknown. The article is one of a group of highly entertaining papers of *Anecdotes of Famous Men* to appear in *The Companion* next year.

**FREE** New Subscribers who send \$1.75 at once will receive **To 1895** The Companion Free to January 1, 1895, and for a full year from that date. This special offer includes The Thanksgiving, Christmas and New Year's Double Numbers.

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### The Kind of Bird to Raise.

Select in the make-up of a fowl a bird that carries a large amount of meat if you want a bird for the table. To secure meat a peculiar configuration is essential. A large, projecting crop is unnecessary, for some of the meatiest birds look flat in the breast. It is necessary to have the quarters extremely broad. If they round out, so much the better, because there is meat carried upon the breastbone. A deep keeled bone to the breast well lined with muscle should round out and feel on the bird very much as a duck does when he is dressed. Secure a bird with a large thigh, because the thigh joint and the bone down through the leg carries a large amount of meat. Look out for a good strong shoulder because the muscles that make the shoulder are the muscles that make their way in the market.—Farm and Home.

### Kansas State Poultry Show.

All who are interested in poultry should attend the Kansas State Poultry show, where they can inform themselves in regard to what kind of poultry to raise, what to feed them, how to run incubators, brooders, bone mills, etc. There will be several kinds on exhibition. Farmers, send your wives, if you cannot come yourselves, for they are the ones who are the backbone of the poultry yards. Incubators, bone mills, etc., are offered for special premiums.

The show is to be held second door below postoffice, at 444 Kansas avenue. Send to D. A. Wise, 707 East Tenth street, Topeka, Kas., for premium list.

See Chicago Sewing Machine Co.'s advertisement in next week's issue.

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