

Buff Cochon Fowls.—SEE PAGE 237.

LEAVENWORTH
AUG. 1, 1872.



American, Swiss and English
WATCHES & CLOCKS,
 WATCH MATERIALS,
 FINE GOLD JEWELRY, DIAMONDS,
Silver and Plated Ware,
 PLATED JEWELRY AND FANCY GOODS.

Jewelry of every description made to order. Country orders promptly attended to.
 HERSHEFIELD & MITCHELL,
 Leavenworth, Kansas.
 sep-1y

TREES, BULBS, HEDGE PLANTS, SEEDS.
 Fruit and Flower Plates. Catalogues, 20 cents.
 jy15-8t-145 F. K. PHENIX, Bloomington Nursery, Ill.

ALL ABOUT KANSAS!

HUTCHINSON'S
Resources of Kansas: 15 years Experience
 240 PAGES, 40 ILLUSTRATIONS.
 And a Colored Map of the State, corrected to May 1, '72.
 BY C. C. HUTCHINSON.

THIS WORK WAS PUBLISHED UNDER STATE AUTHORITY, and contains a full description of the Climate, Soil, Rivers, Water, Timber, Rock, Coal, Gypsum, Farm Crops, Stock, &c.; the Towns, Railroads, Churches, Schools, Newspapers, &c.

Full Particulars about Homestead and Pre-Emption Laws. Eight thousand copies have been sold, and it has received the unanimous commendation of the Press of Kansas. Sent, postpaid, on receipt of 50 cents; bound in muslin, 75 cents.

THE HUTCHINSON NEWS,
 Is published weekly, at the County Seat of Reno county, at \$2.00 per annum. This town is situated where the Atchison, Topeka & Santa Fe Railroad strikes the Arkansas river, and is the end of the Second Division, where a Round House and Machine Shops are now being erected.

Soldiers' Homesteads
 Can be obtained within five miles. Excellent soil, plenty of pure soft water, and healthy climate. **LIQUOR SALOONS ABSOLUTELY PROHIBITED IN THE TOWN.**
 For further particulars, or for the "Resources" or "News," address **CLINTON C. HUTCHINSON,**
 my1-6m-200 Hutchinson, Reno County, Kansas.

SALE OF
Shorthorn Durham Cattle!

AND
BERKSHIRE SWINE!

WE BREED AND HAVE FOR SALE SHORTHORN Durham Bulls and Heifers, and Berkshire Pigs, all bred from stock imported from England. Call and see our stock, two miles from the Agricultural College, Manhattan, Kansas. [j1-ly-40] N. L. CHAFFEE & SONS.

CHOICE FOWLS.

THE ADVERTISER HAS FOR SALE
DARK BRAHMAS, LIGHT BRAHMAS,
BUFF COCHINS,
 Partridge Cochins, White Leghorns, and Houdans,
 At \$4 per Pair, or \$6 per Trio. We insure Fowls to reach the Purchaser in good condition. Address
ISAAC LYNDE,
 ang1-3m-305 Marlboro, Stark County, Ohio.



ARE UNDOUBTEDLY THE
CHEAPEST TO BUY!
BEST TO USE!
EASIEST TO SELL!
 AND
NEVER FAIL TO GIVE
Entire Satisfaction
 IN ANY AND ALL LOCALITIES.

58,168

Sold in Past Three Years!

Every Stove offered as a Proof that the

CHARTER OAK

IS

Doing More Work,
Doing it Better,
Doing it Quicker,
Doing it at Less Expense,

Than any other Cooking Stove made.

SOLD BY
EXCELSIOR
MANUFACTURING COMPANY,
SAINT LOUIS,

Wholesale dealers in in all kinds of

TINNERS' STOCK;

AND BY ALL

Live Stove Dealers.

j15-m-164



Also, for CAMPAIGN GOODS. Address
GOODSPEED'S EMPIRE PUBLISHING HOUSE,
 Chicago, Cincinnati, St. Louis, New Orleans, or New York.
 ang1-2m

A CHANCE FOR BARGAINS

Well Bred Poultry!

I AM COMPELLED TO CLOSE OUT MY ENTIRE Stock of Dark and Light Brahmans, Buff Cochins, E. D. Games, and White Leghorns,

WITHIN THE NEXT TWO MONTHS!
 My Birds are all Well Bred, and will give entire Satisfaction.

I have about one hundred Chicks, that I will sell at \$10 per dozen, and my whole Stock will be sold very low. I will have a few Eggs to sell, until my Stock is sold out.
 Address **GEO. W. BEEBE,**
 j15-4t* Seapo, Kansas.

Pomona Nursery.

FRUIT AND ORNAMENTAL TREES, SHRUBS AND
 Plants, Forest Trees, Seedlings, Hedge Plants, &c. No Agents employed. Good, fresh, reliable Stock, true to name and of the best varieties, at wholesale or retail, cheap for cash. Call on or address
S. T. KELSEY,
 Pomona, Franklin County, Kansas.
 Price List on application. sep-1y

NURSERYMAN'S DIRECTORY.

BIDGOOD NURSERIES.—APPLE TREES A SPECIALTY. Pears, Dwarf and Standard, Concord Grapes, Peaches, Cherry, Plum Trees, and Nursery Stock, at lowest figures. oc-1y J. W. BIDGOOD, Leavenworth, Kan.

COAL CREEK FRUIT FARM NURSERIES, WILLIAM L. G. SOULE, Proprietor. 15,000 Crab Apple Trees (10 varieties), 150,000 Apple Trees, Shade Trees, Grapes, and Small Fruits. Address P. O. Box 211, Lawrence, Kansas. oc-1y

ENTERPRISE NURSERIES.—ALLEN & KROH, PROPRIETORS. Correspondence of Dealers and Planters solicited. Stock warranted true to name. Agents wanted. Nurseries, 12th st., Kansas City, Mo. and Wyandotte, Kan. dec-1y

LEE'S SUMMIT NURSERIES, BLAIR BROTHERS, PROPRIETORS. General Nursery Business. Very heavy Stock, excellently grown. Fruit & Ornamental Trees, Apple Root Trees. Wholesale & Retail. Lee's Summit, Jackson Co., Mo. oc-1y

POMONA NURSERY, S. T. KELSEY, PROPRIETOR.—Fruit, Forest and Ornamental Trees, Seedlings, Hedge Plants, Small Fruits. First-class Stock, at Wholesale or Retail. Pomona, Franklin County, Kansas. oc-1y

M. S. GRANT,
 519, 521 AND 523 SHAWNEE STREET,
 LEAVENWORTH, KANSAS,
 Wholesale and Retail Dealer in

FARMING IMPLEMENTS,

GARDEN, FIELD AND FLOWER SEEDS,
 GARDEN CITY, GRANT AND

MOLINE PLOWS,

SKINNER BREAKERS & GANG PLOWS,

Champion and Excelsior Reapers & Mowers,

MARSH HARVESTER,

Vibrator and Massillon Threshers,

BUCKEYE GRAIN DRILLS,

Cider, Cane and Fanning Mills,

AND ALL KINDS OF FARM AND GARDEN TOOLS; Landreth's Garden Seeds, at Landreth's prices; Vick's Flower Seeds, sold as low as sold by him, thereby saving freight and postage.

HORTICULTURAL TOOLS.

Terra Cotta Ware Trellis Work, Rustic Work, Statuary in great variety, Flower Vases, Aquariums, Globes, Gold Fish Fountains, and other articles too numerous to mention. Low Prices will be given, and every attention paid to customers. jan-1y

SCHENCK'S
Pulmonic Syrup,

SEAWEED TONIC AND MANDRAKE PILLS ARE THE only medicines needed to cure Consumption, and there are but two things to do to make the Lungs heal.

First. The Liver and Lungs must be got into a good, healthy condition; for, when the Lungs are wasting, the whole body is wasting, and the food of a consumptive, even if he has an appetite, does not nourish the body. If the liver and stomach are loaded with slime, it lies there and takes the place of food; consequently, the patient has no appetite, or very little, and the gastric juice cannot mix with the food, which lies in the stomach and spoils or sours, and passes off, without nourishing the system.

SCHENCK'S MANDRAKE PILLS act on the liver and stomach, and carry off this slime. The SEAWEED TONIC is a very pleasant stimulant, which, if taken directly after eating, unites with the gastric juices and dissolves the food, producing good chyme and chyle. Then, by partaking freely of the PULMONIC SYRUP, the food is turned into good blood, and the body begins to grow. As soon as the patient begins to gain in flesh, the matter in the lungs begins to ripen, and they heal up. This is the only way to cure Consumption. No one was ever cured unless they began to gain in flesh.

The second thing is, the patients must stay in a warm room until they get well. It is very important for them, to prevent taking cold when the lungs are diseased. "Fresh air" and riding about are all wrong; and yet, because they are in the house they must not remain quiet; they must walk about the room as fast as the strength will permit, to get up a good circulation of the blood.

To those who can afford it, and are unwilling to stay in the house, I recommend a visit during the winter months to Florida, well down in the State, where the temperature is regular, and not subject to such variations as in more northern latitudes. Palatka, Melouville and Enterprise are points I can recommend—a good hotel being kept at the former place by the Messrs. Peterman; while the accommodations and advantages of the latter place are also such as to facilitate the recovery of all who partake freely of my Preparations and follow the advice I have here laid down, and which is more fully set forth in the circulars accompanying my medicines.

I am now permanently located in my new building, northeast corner of Sixth and Arch streets, Philadelphia, where, on every Saturday, from 9 A. M. to 3 P. M., my son or myself can be consulted free of charge; but for a thorough examination with the Respirometer, the charge will be \$5. SCHENCK'S Respirometer detects the slightest murmur of the respiratory organs, and the operator can readily determine whether a cavity or tubercles have been formed in the lungs, and whether the patient can be cured or not. This the patients must expect to know, if they are examined by the Respirometer.

Full directions accompany all my Remedies, so that a person in any part of the world can be readily cured by a strict observance of the same. J. H. SCHENCK, M. D.

Price of the Pulmonic Syrup and Seaweed Tonic, \$1.25 per bottle, or \$7.00 per half-dozen. Mandrake Pills, 25 cents per box. Prepared and for sale by
J. H. SCHENCK & SON,
 Northeast corner Sixth and Arch Streets, Phila.
 And by druggists and dealers generally. my1-1y-168

THE KANSAS FARMER

DEVOTED TO THE FARM THE SHOP AND THE FIRESIDE

E. SEARS N.Y.

[ENTERED, ACCORDING TO ACT OF CONGRESS, IN AUGUST, 1872, BY GEO. T. ANTHONY, AT THE OFFICE OF THE LIBRARIAN OF CONGRESS, AT WASHINGTON.]

VOL. IX.—NO. 15.]

LEAVENWORTH, AUGUST 1, 1872.

[\$1.50 A YEAR.

The Kansas Farmer

GEORGE T. ANTHONY, Editor.

A. G. CHASE, ASSISTANT EDITOR.
MISS M. E. MURTFELDT, ENTOMOLOGICAL EDITOR.
B. S. CHASE, VETERINARY EDITOR.

Published Semi-Monthly, at 317 Delaware Street.

MAKE UP CLUBS.

There is no better season to make up clubs for THE FARMER, than at the present. Money is becoming more plenty, and there are few farmers but what have some minor articles of farm or garden produce to dispose of at this season of the year, such as chickens, butter, eggs, new potatoes, roasting ears, early cabbage, &c., &c., and with a little trouble, the farmer, the farmer's wife, or children, can easily procure money enough to get THE FARMER, and the money will not be missed.

The hundreds of encouraging letters that we are receiving, leads us to believe that we are making it of more intrinsic, practical value to our readers, than ever before, and the large increase to our subscription list quite lately, substantiates this belief.

There are only about thirty postoffices in the State that THE FARMER does not now reach, but there are at least twenty thousand farmers in the State, that are not taking any agricultural publication.

A little effort upon the part of our agents and friends would secure a large proportion of this number to THE FARMER.

Will they make the effort? There is no agricultural publication in the country that furnishes so much original, practical agricultural matter for the money, as does THE KANSAS FARMER.

One dollar and a half secures it for twelve months, and the person getting up the club receives thirty-three and one-third per cent. for his time and trouble, in agricultural books.

Any book published in this country, will be furnished as a premium. Any boy or girl, man or woman, can get them. Make up Clubs.

SPECIMEN GRAIN.

Mr. H. BUCKINGHAM, Editor and Proprietor of the *Empire*, Concordia, Kansas, sends us some heads of wheat and oats grown in the Republican Valley, Cloud county, and says, "The samples sent are *nothing extra*." Will Bro. BUCKINGHAM please send us down a sample that is *extra*?

If the specimens sent are not extra, we would like to see some that are.

There are eight or ten heads of oats, and they average nearly *eleven inches* in length. One head of wheat measured five inches, the others four and a half inches. The grain in all of them is full and plump, and if thick enough on the ground, has certainly made a large yield.

FAIRS.

The following Fairs will be held at the times and places below named:

Northern Kansas District Fair, September 10th to 14th, at Atchison.
Nemaha County Agricultural Society, September 18th to 20th at Seneca.
Brown County Agricultural Society, September 26th to 28th, at Hiawatha.
Leavenworth County Agricultural Society, September 10th to 15th, at Leavenworth.
Pottawatomie County Agricultural Society, September 25th to 27th, at Wamego.
Republic County Agricultural Society, September 12th and 13th, at Republic.
Salem Township (Allen County, Kansas) Agricultural Society, September 24th to 26th, at Jeddo.
Industrial Exposition, September 23d to 28th, Kansas City.
St. Louis, Mo., Exposition, October 3d to 8th, at St. Louis.
Northern Ohio District Fair, September 16th to 21st, at Cleveland.
Kansas State Fair, September 16th to 21st, at Topeka.
Iowa State Fair, September 9th to 14th, at Cedar Rapids.
Minnesota State Fair, September 14th to 19th, at St. Paul.
Wisconsin State Fair, September 23d to 28th, at Milwaukee.
Illinois State Fair, September 16th to 21st, at Ottawa.
Indiana State Fair, September 3d to 8th, at Indianapolis.
Ohio State Fair, September 2d to 7th, at Mansfield.
Johnson County, Kansas, September 10th to 13th, at Olathe.
Wyandotte County, Kansas, Oct. 1st to 4th, at Wyandotte.
Washington County Fair, Oct. 9th and 10th, at Washington.
Butler County, Kansas, September 18th to 20th, at Towanda.

OUR STATE FAIR.

The Premium List of the State Fair, in pamphlet form, is now ready for distribution, and parties desiring it can obtain them by addressing ALFRED GRAY, the Secretary, at Topeka.

We suggest to our citizens the policy of sending to friends in the East, especially to stock-breeders and manufacturers, copies of the Premium List; as there is no more effective argument, to induce immigration, than an attendance upon one of our State or County Fairs.

An Eastern man, that comes here and sees our fine stock, our large, beautiful fruit, or the magnificent display of grains, vegetables and grasses, with the well authenticated statements as to yield, &c., will not long consent to remain in any of the Eastern States. Therefore, we say, Circulate the Premium Lists.

PREMIUM LIST LEAVENWORTH COUNTY FAIR.

The Premium List of the Leavenworth County Fair is now ready for distribution, and may be obtained by addressing J. W. NIEHAUS, Secretary, or M. S. GRANT, in this city.

The managers have departed considerably from the customary form of getting up Premium Lists, and we think have got it in an awkward shape that will not be appreciated by those who have to refer to it frequently, but they have brought some articles of farm produce to the foreground, that usually occupy a back seat, and the premiums are all liberal.

They, like the State Society, have acted wisely in offering a special premium of \$20, and a second

one of \$10, for the best and largest display of fruit grown upon one farm, and open to all. This will certainly bring out our fruit growers, and as this Fair comes the week preceding the State Fair, the same fruit can probably be used in both places.

THE JOHNSON COUNTY FAIR.

We have not, at this writing, received the Premium List of this Fair; but are informed that the time for holding it is fixed for September 10th, 11th, 12th and 13th, at the County Fair Grounds, near Olathe.

Johnson county has an abundance of good stock, is full of enterprising farmers, and lacks not for ardent admirers of the horse. The Society, or rather the Trotting Association, has one of the best mile tracks in the country; and at the coming Fair it is expected that there will be a very lively competition among fast horses, drawn out by the large premiums that, we understand, have been offered.

Col. HAYS, our present Treasurer of State, has offered some large special premiums for the best farms, competition being confined to the county; and it is expected that other special premiums will be offered.

We hope the attendance may be large, as we feel assured the management will leave nothing undone that will instruct or entertain visitors.

The following are the officers of the Society: Col. J. E. HAYS, President; WM. SCOTT, Vice President; R. E. STEVENSON, Treasurer; J. M. GRIFFIN, Secretary; J. M. HADLEY, Corresponding Secretary.

The Directors, in addition to the above, are as follows: CHAS. PAGE, R. MORGAN, F. W. CASE, C. E. WALDRON, A. J. CLEMMONS, HENRY MCBRIDE, HIRAM MITCHELL, WM. SOWERS, WM. JULIAN, S. S. CASSADY, N. AINSWORTH.

THE WYANDOTTE COUNTY FAIR.

From some cause, that we could never understand, our neighboring county of Wyandotte has been behind other and indeed less favored counties, in the matter of a Fair.

But although late, we are glad to know that they have now organized an Agricultural Society, and propose to hold their first Fair October 1st, 2d, 3d and 4th, at the Society's Grounds, near the city of Wyandotte.

There is in this county an abundance of material for a first-class Fair, if the farmers and mechanics, as well as the ladies, of the county will but do their duty.

The premiums offered are liberal; and a good, large attendance at the Fair will place the Society upon a good financial basis, and be of great value to the county.

WHILE several States to the east of us are suffering a terrible drouth, Kansas has been and is flooded with rain.

The Kansas Farmer

FOREST TREES FOR Shelter, Ornament and Profit

BY
ARTHUR BRYANT, SEN.

THIS IS THE MOST THOROUGH AND PRACTICAL work ever written upon the subject, and should be in the hands of every Farmer in the State of Kansas. It tells you

HOW, WHERE, AND WHAT TO PLANT.

Its low price brings it within the reach of all.

ONLY \$1.50 PER COPY.

We are the sole Agents for the State of Kansas. Send in your orders. We will send the book free of postage, upon receipt of the above price, or we will send a copy free to any who send us four subscribers to THE KANSAS FARMER, at \$1.50 each.

Address, **GEO. T. ANTHONY, Leavenworth.**

ABOUT PLOWING CORN.

J. R. WALKUP, Emporia, Kansas, asks our opinion, as well as the opinion of our readers, as to which is the better practice in dry weather, "To plow corn, or to let it alone."

We infer that our correspondent pre-supposes that the corn is reasonably clean, and the query relates to the effect of the plowing, solely in its relation to the dry weather.

We know that there is an honest difference of opinion upon this subject among really good farmers; but we have investigated the practice in this matter, and have satisfied ourselves that it fully sustains the theory that science would advance, in favor of continued plowing.

A part of the success that attends, or is expected to follow, the continued plowing, depends upon the manner in which the ground was originally broken up, and upon the soil and subsoil itself.

Upon a thin soil, with a gravel or coarse sandy subsoil lying near the surface, we would not recommend repeated plowings during long-continued dry weather; but upon our average prairie, or bottom land, that has been broken deep, there is no system of cultivation that will add so much to the yield of a crop during a protracted drouth, as frequent plowings.

The greater the drouth, the oftener should it be plowed. One principal reason for the correctness of this plan is, that loose, finely divided earth will radiate heat faster than close, compact bodies of earth; and the fall (?) of dew depends upon the speedy radiation of heat, or, as we call it, cooling off, after the effects of the sun's rays are spent, near sunset and early in the evening.

A thin soil, with a gravel or coarse sandy subsoil lying near the surface, will retain the heat much longer, will not cool off as quick, as a rich loam, and will not get much benefit from the fall of dew, or condensation of moisture, in the atmosphere; hence, we would not expect much benefit, if any, from frequent plowing of that kind of soil.

The cultivation of next year's corn crop ought, if possible, to be commenced this Fall, by plowing and subsoiling the ground that is to be planted.

As early in the Spring as the ground will do to work (and a good Fall plowing will give nearly two weeks' advantage, if it is anything like a wet Spring), give it another plowing, and harrow and cross-harrow, and keep harrowing; and if there is any time left, harrow it some more. Then, plant early, and roll with a heavy roller. As soon as the rows can be seen, take a V-shaped harrow, knock out the front tooth, and harrow, straddling the rows. For the second and third plowing, we prefer the double-shovel, going twice in each row; and after that, the five-toothed cultivator may be used to advantage.

Until the corn comes in tassel, it should be plowed once each week, or at most, every ten days.

We have not alluded to manures, but we are

convinced that our farmers can not, and will not, much longer neglect so potent an element for making money, as is manure, upon the corn and other crops.

Properly applied, upon any of our new prairie soils, we believe it will add *one-fourth* to the yield; and to those fields that have been cultivated in corn from five to ten years, it will add from one-third to one-half.

There is scarcely a neighborhood in the State but what has demonstrated this; and the reason why farmers do not more generally adopt it, is something past our comprehension.

As a rule, we are aware that the farmers of Kansas, or indeed, of the entire West, are not well fixed to save manure; but that that is saved, or rather accumulates, around the barns, is not used, but suffered to go to waste, or hauled out to fill some ditch or gully.

On large farms, the fields can be most easily and cheaply fertilized by raising clover, rye, &c., and plowing under green; but this will call for a system of rotation which will, in turn, to make it profitable, require that the farm be fenced or divided into fields, that the clover may be pastured, and the grain fields gleaned by stock.

We must put more money, brains and labor into our farm operations; and the sooner it is commenced, the sooner will farmers cease to complain of the unprofitableness of farming.

A BOOK—NOTICED.

From the publisher, S. R. WELLS, New York, we have received a copy of a cheap pamphlet entitled, "The Model Potato," it being "an exposition of the proper cultivation of the potato; the causes of its diseases, or rotting; the remedy therefor; its renewal, preservation, productiveness, and cooking By JOHN MCLAURIN, M. D., edited with annotations by R. T. TRALL, M. D."

After a careful reading, we have concluded that we never saw so much matter brought together that did not contain a single grain of common sense, and that did contain so many grains of ignorance and foolishness, as does this.

On page 76, the authors give what they call a remedy for deep planting, which we quote below. That the reader may understand the subject better, we will say that these two doctors (?) start out upon the assumption that the potato crop of this country is ruined by the rot, but they, after long years of labor, patient and arduous research and observation, joined to their knowledge of Agricultural Chemistry and other scientific matters, have discovered a system by which the rot may be effectually banished, and they have grouped this knowledge into seven errors, and seven remedies. The errors are, one and two, bad seed; three, vivisection (we supposed this applied to dissection of animals); four, dwarf planting; five, crowded planting; six, deep planting, and seven, excessive covering. Of course, excessive covering don't mean deep planting.

As a remedy for error number five, crowded planting, they recommend the planting of one large potato, three and one-half or four feet apart. This makes the following extract, which is a part of the remedy for deep planting, more ridiculous:

Run a furrow with a double-molded plow, alongside of the edge of the upturned sod: not in the furrow, but on the surface, drop your large potatoes, three and one-half to four feet apart, as already explained. Your return trip will cover the seed, and, at the same time, turn over a new sod ready for another row of potatoes to be dropped, and so on until the whole field is planted. The quantity that can be planted in one day by this new method is double or triple that which can be planted in the old way, (astonishing) thus accomplishing another great saving of labor.

The caliber of the plow should be such, if possible, as to be capable of opening a furrow *twenty-one inches or two feet wide*, that is, ten and one-half or twelve inches on each side, so as to equalize the distance of the sets apart, crosswise as well as lengthwise.

To read this, one would suppose that neither one of these men ever saw a plow.

Further on they tell how a farm may be subsoiled at weeding time, by "running between each row a double mold-board plow, that is to be only

about one foot wide; and in two successive years the field will be sufficiently subsoiled."

Do they know what subsoiling means? We doubt it. But we can devote no more space to such trash. We only wonder that S. R. WELLS should publish such a work, expecting anybody to pay fifty cents for it.

If any of our readers have this amount to spend for reading matter, we recommend them to spend it for a last year's almanac rather than for this potato book.

ALLEN COUNTY.

An attempt was recently made to organize a County Agricultural Society in Allen county, but from causes that we cannot understand, the Directors failed to conciliate and compromise the conflicting interests of different portions of the county; and therefore the County Society is, for this season, at least, a failure.

Salem township, of that county, has had a Township Society organized, has grounds fenced and buildings erected, and has held one or two excellent Fairs.

It is now proposed to organize a District Society, composed of Salem, Humboldt, Elmore and Cottage Grove townships, and invite the rest of the county, and parts of Woodson, Neosho and Wilson counties to join them in holding a Fair this Fall.

Allen county, particularly the southern part of it, has some of the best thoroughbred stock, of different kinds, there is in the State, and the farmers are enterprising and intelligent; and it will be strange indeed, if the proposed Fair is a failure. Salem township has not only kept alive, but has for a long time had in effective working condition one of the largest and best Farmers' Clubs in the West; and a community that can do, and will do, this, are not likely to make a failure of anything.

THOROUGH BREEDING.

FREDERICK WEST, Holton, Jackson county, Kansas, sends us an article entitled, "Thorough Breeding," in which he advocates the breeding of stock "according to Nature's rules," and saying that "Nature's rules, and experience, are about all we have to guide us in breeding stock."

What more do we want for a guide? Experience alone, without help from Nature, is a sufficient guide, in our opinion. Mr. WEST, like a good many others, seems to have a very confused idea about nature and nature's laws. He says: "When you breed animals, you must keep within the same species; for if you cross them, the product is a hybrid that ceases to be productive—like the mule."

Well, what of it? We do not want the mule to breed from. We want him for work, and his special traits and qualities fit him for peculiar uses that neither the horse nor the ox can fill. In this particular case of cross breeding, the progeny is harder than either of the parents. Where, then, is the wrong of cross breeding?

Mr. WEST says, again, that in-breeding is a crime against Nature's laws, and asserts that the best specimens of animals have been produced by a correct system of crossing, and not by in-breeding; as for example, the Morgan horse and Durham cattle.

This is not proved. We fancy that the record of both the Durham and Devon cattle, the Essex and Berkshire hogs, and, perhaps, many other breeds of animals, will show records of in breeding that would astonish friend WEST; and although we do not know that the Morgan horse was in-bred, we do know that he is not now a type of our best horse.

Some people seem to be living on nettles all their lives, for fear they will violate some of Nature's laws; and yet, their every act and motion is artificial—is not following Nature. Should we of the nineteenth century base all our acts and customs upon so-called Nature, we would be very far removed from what we are. Our clothes, our houses, our food, our stock, would, we fancy, be somewhat different, and we would advise friend WEST to take

things as he finds them. Let the lamp of experience be the guide. We need no better, and should desire no other.

MORE AND BETTER STOCK.

The sooner farmers learn and appreciate the fact, that it is cheaper to send one hundred pounds of pork to market, than it is to send five hundred pounds of corn that it takes to make it, the sooner they will commence to make money by farming. The advice of an old writer to a young one, will apply well to farmers. He said, "When you desire to commit your thoughts to paper for publication, *boil them down.*" So say we to farmers when they desire to ship a thousand bushels of corn to market, first boil it down. Convert it into pork, beef, mutton, wool, butter, or cheese, and thus save freight on at least eight hundred of the thousand bushels of corn.

It must be remembered that the farmer—the producer, must pay all the freightage from the farm to the mouths or backs of the consumers, and this being so, he should endeavor to concentrate his produce as much as possible. It costs no more to move a pound of wool than a pound of corn, and the former represents perhaps six or eight pounds of the latter.

These being facts, farmers should, if they look to their own interests, keep not only more but better stock. Endeavor to consume every pound of hay, fodder, corn, oats and rye, together with the different root crops that the farm is capable of producing, upon the farm, and ship cattle, sheep, and hogs.

WOLF CREEK TOWNSHIP.

In our last issue we copied from the *Kansas Chief* some statistics in relation to the above township, in Doniphan county, furnished that paper by Mr. A. BENNETT, Township Trustee.

About the same date, this gentleman wrote a communication to THE FARMER, embodying the same and some additional facts, as follows:

"There were 75½ acres of potatoes, which made 9992 bushels; 9 acres of sorghum, which made 945 gallons of syrup; 131 acres of hemp, which made 833,000 pounds; 10 acres of broom-corn, which made 6,000 pounds; 9 acres of rye, which made 228 bushels.

"There is in the township, 165 mules, 1341 horses, 1321 cattle, 101 sheep, 5187 hogs."

Mr. BENNETT says; "There was a very large acreage of Spring wheat sown, to take the place of the Fall wheat which was winter-killed, and also a large breadth of barley and oats, which are now looking fine.

"We have the largest corn crop by one-half, ever planted in this township. Fruit never promised so well, many new orchards were set this Spring, and many new farms are being opened up."

Will not other township trustees imitate Mr. BENNETT's example, and furnish us with the statistics of their township. We deem it as valuable matter as we can publish.

ACKNOWLEDGMENTS.

WM. H. THOMAS, who lives in Salt Creek Valley, near this city, left at this office twelve Early Rose potatoes, that weighed eight pounds, or on an average three-quarters of a pound each. They were planted on the 28th of March, and dug July 11th, fully matured. A better potato was never grown.

RICHMOND DALTON, who lives on Crooked Creek, in Jefferson county, Kansas, sent us, at the hands of G. W. MOORE, two twigs, taken from the same tree, both having fruit on them, but entirely dissimilar in appearance. The tree is a seedling, no buds ever having been inserted, and forks about a foot above the ground into four branches, two of which bear a very good seedling, fuzzy covered peach, while the other two bear a perfectly smooth conical shaped fruit, that, except in shape, resemble a plum more than a peach, the skin being perfectly smooth, with no fuzz or down upon it, and the peach itself (it bore last season), is said to be

sour and worthless. If we recollect rightly, Mr. MOORE informed us that there were several other trees in the same orchard that show the same freak.

Mr. DALTON has a large orchard of peach, pear, apple, and plum trees, and is an old fruit grower, but never saw anything like this before. Can any of our readers explain this physiological "sport"?

STEAM CULTIVATION.

Mr. E. LAWRENCE, of Louisiana, who has been using the steam plow and cultivator, writes to a New Orleans paper that in 1870 he plowed 220 acres of land twenty-six inches deep, and planted the same to sugar cane. In April and May, when the corn was about eighteen inches high, it was cultivated by steam, with a five toothed cultivator, to the full depth of the plowing, going twice in each row, going over about ten acres each day.

The cane grew very rank, and although a part of it was damaged by wind, yet the yield was over three thousand pounds of double refined sugar per acre, being nearly three times an average crop.

JERSEY HERD BOOK.

Col. GEO. E. WARING, of Newport, Rhode Island, Secretary of the American Jersey Cattle Club, is now ready to furnish the necessary blanks and instructions to those who desire to make entries in the second volume of the Jersey Herd Book. Applications should be made at once.

CORRESPONDENCE.

FOREST TREES IN KANSAS.

BY R. S. ELLIOTT.

EDITOR FARMER: How many of the farmers of Kansas, who want trees, will gather and plant seeds of the natives? How many will take off cuttings this Fall, for planting next Spring? Let us allude to a few native trees:

ASH.

The white ash trees, in my little trial farms, do well as far as Pond Creek, just on the west line of the State. It will, no doubt, grow readily from seed in all parts. The seeds ripen in the Fall, and may be planted then, or kept till Spring. ARTHUR BRYANT says the seed, to be kept over, "should be mixed with moderately damp sand," for, "if kept dry through the Winter, it is not likely to vegetate." But of green ash he says: "The seed will germinate readily if sown dry in Spring." Dr. LOGAN, in the Kansas Geological Report, says the white ash is native in Kansas; but I am not sure. The ash along the Smoky Hill is said by botanists to be the green ash. It is full of seed, and I suppose the same is true of ash trees in other parts of the State. Ash transplants well. The best way is, probably, to plant the seed in drills about four feet apart, putting it in rather thick, to allow for abortive seeds, and expecting to thin out and transplant the second year; or, they may be left quite thick, and then thinned for use as hoop-poles. It would be better to put the rows only three feet apart, if the farmer has an adjustable cultivator, or has gumption enough to make a narrow tool to run between the rows. The little trees, on old land, must have cultivation. On new breaking, out here, we may sow broadcast, and get trees to transplant the next Spring; but after the first season, this broadcast sowing will not do. The weeds are too strong. On the whole, to drill is best.

BOX ELDER.

Seed ripens in the Fall. May be treated as that of white ash. Trees along the Smoky, in Saline and Ellsworth counties, are full of seed, and I suppose are in other places also. I think it likely that the seed will grow readily, if kept in a dry, cool place, all Winter, and planted in the Spring. Plant in drills: or, if sown broadcast, sow very thick, because many of the seeds are abortive, and because, also, the trees will better defend themselves against the weeds. You can thin out from broadcast sowing, leaving the trees in rows, and transplant those

taken out at one year old. I did this with broadcast allantus here this Spring. But the drill is better. Trees can be raised broadcast, and if a farmer will not try any other way, let him try this.

COTTONWOOD.

For a large plantation, cuttings are the cheapest. Get them in the Autumn, after the fall of the leaf. Cut in lengths of about twelve inches, and bury in earth, so that water will not stand on them. This process enables the cutting to get calloused at the lower end, and have its bud ready at the upper, to start soon in the Spring. For a small plantation, yearling trees from a sand-bar, if one is near, do very well.

COFFEE BEAN.

Gather the pods, and let the seeds stay in them till Spring, kept in a dry and cool place. Plant early in Spring. This is a valuable, but rather scarce tree. In all of Eastern Kansas it is a good tree to plant.

HONEY LOCUST.

Keep the pods till Spring, in a dry and cool place, if not convenient to plant in the Fall. If planted in Spring, the seeds must be immersed in warm water, to soften the horny shell. If planted in the Fall, this is not necessary; but some may not grow till the second year.

LINDEN (BASSWOOD).

BRYANT says: "It produces seed in considerable quantity, which, if sown when ripe, or kept in damp sand till Spring, will mostly germinate the first season. The seedlings transplant easily." The seed ripens in the Fall. All bee-keepers should gather linden seeds, or get trees otherwise.

HICKORY.

According to MICHAEL, the nuts should be put in boxes, with earth, and kept moist till Spring; the success of which, he says, is certain. BRYANT says: "If this plan be adopted, care must be taken that they are kept so cool as not to sprout too early for planting. Some advise planting in the Fall; but I have never succeeded even tolerably well in this way. The nuts are likely to be discovered and taken out by mice and squirrels, which, if they once find them, show great partiality and some cunning in hunting them up." Nuts which had been kept over Winter dry, have germinated well at this place.

OAKS.

The acorns may be planted as soon as ripe. BRYANT advises Spring planting, on account of squirrels and mice. If the acorns are kept over, it is best not to let them get too dry. They must be kept cool, or they will germinate too soon. I have a nice growth of young trees here, from acorns planted in November, 1870. Oaks, like hickories, grow slowly—but they grow. The timber of ash, hickory and oak will have fabulous value in a few years. West of the one hundredth meridian of longitude from Greenwich, the material for a common wagon does not grow on the American continent. The one hundredth meridian crosses Kansas Railway near Ellis. West of that line the "hard woods" of our forests are unknown, except, perhaps, a few scattering trees in Kansas.

WALNUTS.

Black walnuts and butternuts have only to be kept out of doors, covered lightly with earth or litter, till Spring; or they may be planted at once, taking the risk of mice, &c. Oaks, hickories and walnuts are all best planted where they are to stand. Get the ground ready, and run off in rows either three or four feet apart; run cross rows, and plant at the intersection, two nuts in a place. If any fail, transplant at one year old from the places where two trees have come.

Here are nine kinds of trees, native in Kansas, ripening their seeds in the Fall, and all valuable. We might add the sugar maple, which also ripens its seeds in the Fall, differing in this from the silver and red maples.

The boys can gather the tree seeds—enough for the farm, and some over, to be sold to the seed

chant, in order to supply the people in localities where the trees are not now bearing seeds. Let the boys (and girls, too, for that matter) be encouraged to gather the seeds, and if any are sold let them have the money for their own use. I take it for granted that we shall soon have dealers in the seeds of Kansas. I had to send to Philadelphia and New York, in 1870-71, to get seeds. In 1871-73 I got them in Illinois. In 1872-73, if I need any, I want to get them in Kansas—at least, so far as our native trees are concerned.

All the Editors of the State ought to copy this article; and with permission of THE KANSAS FARMER, I am willing each should print it as if addressed to himself.

Wilson, Kansas, July 15, 1872.

THE GREEN-STRIPED MAPLE WORM (ANISOTA RUBICUNDA—FABR.)

BY PROF. O. V. RILEY.

[LEPIDOPTERA BONEBYCIDÆ.*]

On the 28th of June I received the following letter:

DEAR SIR: We are very much troubled out here in Kansas with worms. You no doubt know some people who are always afflicted with worms; those, however, that I wish to ask you about (I mean the worms, not the people) are those that are eating all the foliage off our shade trees and soft maples; they trouble none others.

About two years ago was the first I noticed. There were not a great many that year, but last year they came in increased numbers, so that very many trees were eaten entirely bare, there not being a single leaf left. This year they are appearing by the million on the trees in my yard, and, in fact, on all the soft maple trees in this vicinity.

The first you discover, will be the eggs laid in clusters on the under side of the leaves, generally near the end of the limbs, on the new growth. They soon hatch and begin to eat, grow and spread over the trees, and when they have entirely stripped the tree, crawl down the body on the ground, under foot, into the houses and elsewhere, in search of food. They grow to be about two inches long—great green worms. The eggs are evidently laid by some kind of fly. In our city, and in fact in all this country, the soft maple, on account of its rapid growth, has been almost universally set out for shade trees, and this worm nuisance has come to be a serious question.

If they are a thing that has come to stay, to appear and reappear year after year, I propose to cut my trees down, and plant something that is worm proof.

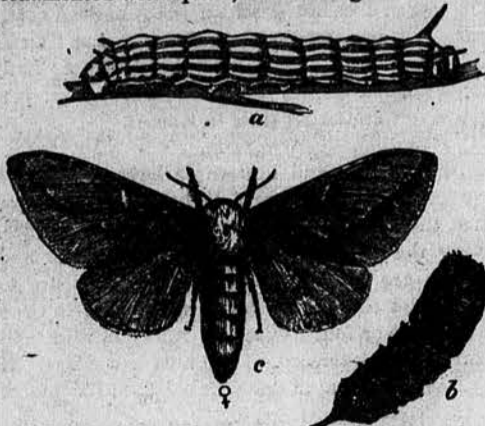
You may be conversant with this matter and able to tell us at once their nature, and whether they are likely to become a permanent pest, and if there is any remedy for the nuisance. Doubtless they are in other parts of the country, but I have never seen any except here in Kansas.

If you can tell me anything about this matter, a letter from you would be most gratefully received by

Your obedient servants, HORACE J. SMITH,
(and many others.)

Ottawa, Franklin County, Kansas, June 24, 1872.

The worm referred to, as I at once inferred, and subsequently proved, by specimens sent by Mr. SMITH, were what may be termed the green striped maple worm, of which figure 1, a, will serve as a specimen. Its usual color is greenish, being striped with pale yellowish green and dark green, and ornamented with spines, as in the figure.



It is chiefly characterized by a rosy tint at the sides near the end, and by two blunt, black horns about one fifth of an inch long, on the top of the second joint, projecting over the reddish-yellow head. I subjoin a detailed description, as the cat-

*Throughout this paper I have in this manner indicated, in brackets, the order and family to which the insect treated of belongs.

erpillar was unknown to HARRIS, and no good description is accessible to the ordinary student.

DESCRIPTION OF LARVA.—Length when full grown, 1.50 inches, general color, pale, yellowish green, striped above alternately with eight very light (almost white) yellowish-green lines, and seven of a darker green; inclining to black, the medio-dorsal one usually the darkest, and showing palpitations. Characterized by two black, blunt, anteriorly-projecting horns on joint 5; two lateral rows of posteriorly projecting, more pointed, shorter spines, one (the largest) below and one above, stigmata, and most prominent on joints 10 and 11, which are here somewhat dilated, and tinged with rose red.

When examined with a lens, the body both above and below is found to be thickly studded with transparent granulations, and there are four dorsal polished sub-obsolete spines, the anterior on upper edge, and posterior on lower edge of dark stripe, and most prominent on joints 11 and 12.

Head more or less intense copal yellow, the ocelli on a black ground. Stigmata, in lower dark line, oval black, with a central pale line. Joint 1 with six black elevations on anterior edge. Anal shield flattened, greenish with a black blotch superiorly and margined with eight black spines, the two terminal stoutest.

Venter black, with pale median line and a prominent black spine each side, and sometimes others less prominent.

Legs greenish or yellowish, the thoracic and anal marked with black, the abdominal with rufous claspers.

Varies much. Specimens in last molt often with black predominating, the dark lines being jet black, the two lowermost often coalescing, all sometimes coalescing on joint 1, and anal shield and the legs being almost entirely black.

Other specimens with the pale colors predominating. Hundreds examined.

The eggs from which the worms hatch are deposited in batches of thirty and upwards on the underside of a leaf, each is about .05 inch long, sub-oval, slightly flattened, translucent and pale greenish. The worms go through four molts, and come to their growth within a month.

They then descend and enter the ground, where they transform to the chrysalis which is a deep rich brown color, roughened with small teeth or spines, about the head, and a row of teeth around the anterior edge of the joints, and a tolerably long apical projection which bifurcates at top (figure 1, b).

In due time this chrysalis, by aid of the spines with which it is furnished, works its way to the surface, and gives forth the perfect insect, which is a most delicate moth of a pale yellow color, shaded with pink as in the figure c, which represents the female, the male having a somewhat smaller abdomen, and broader more pectinate antennae.

This moth may be called the Rosy Dryocampa. It varies a great deal. In our western experiences, the yellow predominates, the rose color being but faintly visible. Ordinarily the front wings might be described as rose color, with a yellow band running diagonally across the middle and broadest on the anterior margin. I have seen eastern specimens where the rose color was quite intense on the front wings, and where the hind wings, which are more generally pure yellow, have a rosy band across them.

With us there are two broods of this insect each year, the first brood of worms appearing mostly during the month of June, and giving forth the moths the latter part of July; the second brood of worms appearing in September, wintering in the chrysalis state, and not issuing as moths till the following May.

Dr. HARRIS gave to the genus to which this moth belongs, the name of *Dryocampa*, meaning "oak caterpillar," because all the other species of the genus feed on oaks, and although our maple worm prefers the soft maple, it will, nevertheless,

also feed on oak, as it has been found thus feeding by my friend WM. SAUNDERS, of London, and I have myself fed it on oak in confinement.

REMEDIES.—This insect occasionally becomes injurious in the West, but seldom two years in succession. In 1867 it effectually stripped the maples around Peoria, Galesburg, Princeton and Monmouth, in Illinois, but attracted no particular attention the following year.

When the worms are abundant, as they have been with Mr. SMITH, the best way to get rid of them is to knock them down and destroy them. The insect should also be destroyed as opportunity presents in the other stages of egg, chrysalis, and moth.

BUDED PEACHES VS. SEEDLINGS.

BY W. W. TIPTON.

EDITOR FARMER: D. A. HADLEY, of Wyandotte, asks a fair question in the July 1st number of THE FARMER, about his successful President peach, but leaves the subject otherwise so dark that no one could make a decided answer without knowing the condition and uniformity of the soil, its lay, the different varieties in his orchard, and their condition. If this top budded peach is the only President he has of the same age, this alone might be an answer to his question. Of this, he don't say.

All fruit growers know that some varieties come in bearing much sooner than others, and that some are shy and others profuse bearers. Peaches vary in different situations, even in the same orchard, so that were it not for the blossoms, leaves, and glands, they would be taken for different varieties. I have seen the same result with pears grafted on apple; also apples grafted on old crippled limbs or trees of different age, growth, and condition. One may bear profusely, the other sparingly. For these reasons, the older a fruit tree gets, the more surely and profusely its bearing, standing in the same situation, granting sufficient health. If these be facts, it follows that any course that cripples the strong growth of woody fibers by heading back the top, tapping the roots, boring the body, &c., will shorten the wood growth, and enable the tree to mature before cold weather its proper amount of fruit buds, for the next year's crop.

Peach seed planted in the Spring should be budded the next August or September. Such budding at the base on the one-half year old stocks, does not cripple the future growth of the tree so much, as to top a tree at two years old, but it next year, and again top the last year's growth to allow the buds to make an entire new top. Again: Insert a bud in the center limb of the same variety of a peach tree, and it will mature more blossom buds proportionately, than its more thrifty outside brothers. With all these contingencies and many others that might be mentioned, I have no idea that friend HADLEY's peach is any peach from nature.

Now, I wish to say, I was not prompted to write this so much to give a reason for the prolific peach and the want of uniformity in bearing budded vs. seedling trees in Mr. HADLEY's orchard, as to pray your readers to not follow the example of the "many who cut down their budded peach trees as worthless."

Act prudently, get THE KANSAS FARMER, read the action and proceedings of the Pomological Societies, and use the varieties of fruit there recommended for general cultivation. If your land is rich bottom, and your trees grow limbs from two to seven feet per year, be quiet, and your heirs may reap the benefit in the future, if you don't. If you cannot do this, and you do not know your varieties, rebud from those you do know; spare the tree, tap its top or root, bore holes through its body, and do many things that might bring abundant fruit, ere you could get it from newly planted trees, and what surety have you that they will bear better? If you get so soured against budded trees of un-

known varieties, but in some well known hardy seedling, and save your trees. I have an orchard of over six thousand trees in the rich bottoms of the Neosho, one-half mile north of Burlington. One-half are budded peach trees three to six years old, and over fifty varieties, and many are large enough to bear from one to ten bushels of peaches. Among these are twenty varieties of the finest and best seedling peaches I could find in this valley from Emporia to Fort Scott. I took them from bearing trees, budded them at the base of six months stocks, the same as the old standard varieties of the above fifty. Not one of them have matured a peach yet. Hales' Early, Early York, Cooledge's Favorite, Yellow Rarripe, and Heath Cling, have now a few scattering peaches on. Yet, not a seedling of all these brag hardy neverfails standing beside them, held a blossom long enough to show a bloom. Not even the Indiana Free and Cling, which were among the number.

Last Spring I visited several budded peach orchards on the high ridge prairie. I had budded two of these orchards, the trees the same as my own, except I used the old hardy standard varieties only, every tree in full bearing—and one of many has more peaches now on than all of my 3,500 in the bottom—yet the trees of the same age and variety are not half as large as my own. Now comes a question. What produces this difference? Is it the position alone, or is it the soil, the growth, the air, or other elements, or is it because they are budded?

Well, have I, or can I, be tempted to cut down my yet unfruitful trees, apples as well as peaches, for the tops are now of the older ones already touching, apple with peach one way, and yet no fruit upon either of any amount? No, never. If I or my children do not live to see thousands of bushels of fruit in this said orchard, I am content to believe that some better and wiser eyes will. The result so far is much as I expected when I planted the trees. Last Spring from a convenient lookout in my house, I selected the highest ridge, and on it a still higher mound or knoll, prominent in plain view three miles southwest, made claim to it, fenced fifty acres, and planted over three thousand apple and peach trees upon it. This orchard slopes to the east, north, and west, about three miles from this. I planted ten acres more on high prairie, facing the south. The apple trees are set 25 feet by 25, and as many peach trees in between, making all my orchards $12\frac{1}{2} \times 25$ feet.

Now, after thirty years experience of practical work in growing trees, in attempting to bring some of my tardy, unprofitable trees in bearing, I notice that I doctored one hundred near to death, from last Fall's work. I took the books for it, however I was sold. But I must close.

Burlington, Coffey County, Kansas.

OLD FARMERS, PLEASE TAKE NOTICE.

BY RICHARD HAWORTH.

EDITOR FARMER: The following is one among several other similar preambles and resolutions adopted at the "Big Creek Convention" of delegates, representing several Farmers' Clubs in Southern Kansas, as published in the Fort Scott Monitor for June 12th, which, I think, should claim some attention:

WHEREAS, The farmers have to bear the heat and burden of the day, and they receive the least reward for their labor: Therefore,

Resolved, That they devote more of their time to the study of Agriculture, that their avocation be more attractive and their labor more abundantly rewarded.

I have no objection to this or any other of the resolutions; but the preamble, I think, conveys an idea not strictly truthful. Do the farmers of Kansas believe that they receive the least reward for their labor? Do they believe that they bear the heat and burden of the day more than any other portion of the laboring classes? Do they believe that they are imposed upon more than other laboring men?

I have lived on a farm all my life (I am not yet

twenty-one), and I should answer these questions in the negative. There is nothing to compel any one to farm, if he does not want to; and if this be the most irksome and the least remunerative of all other labors, why are there so many intelligent and honest men engaging in it, and advising others to engage in it?

If any gentleman believes these assertions, why does he not prepare his boys for some other business? If he thinks they must be farmers, why does he not teach them to believe it is the most pleasant and the most certain of a profit in the end, of any other business the laborer can engage in? For they certainly can take their choice of all that is before them, and every man should strive to give his sons as good a chance as possible. Therefore, I would say, whatever you set before them, as a means of support, give them encouraging words—words that will inspire them with a feeling of independent self-reliance, that will carry them safely through the trivial difficulties that may assail them, whether they be farmers, mechanics, or in any other honorable employment.

I rejoice that I am now, and ever intend to be, a farmer. I believe it is a pleasant, honorable and easy employment, and one that I would prefer above all others. But I don't want my father, or any Club that he may belong to, to be sending out to the world, through the press, their united belief that it is the most burdensome and the least remunerative of all other employments; that the farmer is the most imposed upon, and then set it before me for my occupation and means of support. Such public assertions as these will cause a boy to become like a humored child—always peevish and fretting, grumbling and railing about their business being worse than anybody else's, and they become fit for no business whatever.

Lostine, Kansas, July 3d, 1872.

THE THOMAS SMOOTHING HARROW.

BY E. D. LADD.

EDITOR FARMER: I have just read your remarks, in connection with those of a correspondent of the *Iowa Homestead*, in your issue for July 15th, on "Thomas' Smoothing Harrow," and your very proper advice to examine and test it before buying.

Did you, or anybody else, ever see or hear of any matter or thing that commended itself to universal acceptance? I presume not.

I have used one of these harrows for more than a year past, and have tried and tested it in almost or quite all the ways, and for all the uses, recommended by the inventor; and although I do not find it an entire success in every case, I do find it to be, in the main, much the best harrow I ever used. On newly plowed, rough, cloddy ground, I do not use it until I have first gone over the ground with my heavy-toothed "Premium" harrow; then I follow with the *Smoothing* harrow, weighted, with excellent effect. I do not like to run it over my corn when it is a foot high; but it is much the most economical of time and effective tool for the corn crop from the time it is planted until it is five or six inches high, that I have used. On account of the slanting, backward position of the teeth, it is, in the main, non-clogging; and still I do not find it advisable to run it, except with special care, over the young corn growing on last year's stubble ground, for the old stubble will hang to it enough to do considerable damage to the young and tender plants.

But I have just finished running it over my potato ground, covered with small weeds, and the potatoes just coming through the ground, with great success. In this case the driver rode upon the harrow.

I used it to harrow in my millet, to run over my grass land in the Spring, seeded last Fall and mulched with stable manure to break up and distribute the mulching, which it did admirably, instead of dragging it into heaps, as the common harrow would have done. In fact, I use it to ad-

vantage, as I think, in some one or other part of the process, in preparing all my ground for crops, and putting them in.

"My harrow is in three sections, contains ninety-six steel teeth, and works a width of nine feet. As my soil is heavy, I usually work it with the driver riding upon the harrow (except in working small corn); and from the position of the teeth, it then works as easily as, or easier than, a common harrow in the usual way.

In these facts and opinions I am confirmed by my neighbors, who have seen it working. I have no pecuniary interest in its manufacture or sale.

Lawrence, Kansas, July 18th, 1872.

SOME GOOD IDEAS.

BY WM. BROWN.

EDITOR FARMER: Several months ago I wrote thee that we had organized a Farmers' Club, and from that time until the present, we have been the happy recipients of thy valuable paper—THE KANSAS FARMER—and to it we owe much of the interest which has crowned our every meeting, and made our Club a complete success. Selections from it are read in nearly all of our meetings, which has been a wonderful stimulus in producing the happy results which have been effected through the agency of our organization.

Stock growing, forest culture, hedge fencing, fruit trees, &c., have each been largely discussed. Committees have been appointed to visit farms, note the condition, to offer suggestions. Since then, each member of the Club has been directed to produce a plot of his farm, together with a written statement thereof, showing the number of acres owned, number under cultivation, number of rods of hedge fence, number of acres of forest trees, age, kind, and distance apart, the number of fruit trees, age, kind, and condition, the slope of ground, soil, and what amount of fruit expected this season, amount of stock, and quality, the poultry, the machinery, and all farm implements, and whether sheltered when not in use. We have a large blank book of three hundred pages. These reports are kept on file for future reference, and they are very interesting. Arrangements are now being made for holding a Fair this Fall, the 6th and 7th days of ninth month. The Premium List is full.

Columbus, Cherokee County, Kansas.

BUCKWHEAT.

BY NOAH CAMERON.

EDITOR FARMER: We have grown buckwheat for several years as a leading crop, and we think it pays well, in fact, we would have it in preference to wheat all the time in this locality. It brings, on an average, about as much per bushel as the latter grain, and you are more sure of a crop. About the only difficulty we have experienced, was to get a good stand. If a heavy rain comes soon after it is sown and before it is well up, and then the sun comes up in a day or two, the ground bakes so it can never get up, as there is not force enough to the germ to break through even a light crust.

Whenever such cases happen now, we go on again with the harrow as soon as the ground will permit, even if there is danger of destroying a good deal of the buckwheat. We never sow less than one bushel to the acre, and from that to one and a half. We find that weeds grow so rapidly in this country, that you have got to have a good stand, or before the buckwheat can branch out and occupy the ground, the weeds are up and on an equality with it.

We have got the best results in grain by sowing the first week in August, but we would not advise as late sowing as that, as an early frost would ruin the crop. About the middle of July is the safest time. We calculate that buckwheat will yield \$25.00 worth of honey per acre, and as much more in grain.

Lawrence, Douglas County, Kansas.

HOW WE CAME BY IT.

In this issue will be found an interesting article from the pen of Prof. C. V. RILEY, State Entomologist of Missouri. It is a portion of a paper on Economic Entomology, written for publication in the forthcoming volume of our State Agricultural Reports.

The following letter from the Secretary of our State Board of Agriculture, accompanying the manuscript, is characteristic of the unselfish devotion of its author to the interests of the State, and will show that to Secretary GRAY alone, our readers are indebted for this favor:

EDITOR FARMER: HORACE J. SMITH, of Ottawa, recently addressed a letter to Prof. C. V. RILEY, State Entomologist of Missouri, enclosing specimens of a worm which is denuding the soft maple trees in different parts of the State, and asked for a remedy. Prof. R. replies that he had described the worm in a paper on Economic Entomology, which had been forwarded to me for publication in the State Agricultural Report.

Mr. SMITH now requests that so much of the paper as related to this worm be published in some of the State papers. As the ravages of this pest have extended throughout the State, and as THE FARMER is the best medium for reaching the farmers, I herewith send so much of the paper as relates to the subject, in advance of its appearing in the Agricultural Report. Also, find cut.

Yours truly, ALFRED GRAY.

ILLINOIS AGRICULTURAL COLLEGE.

In the *Western Rural*, of Chicago, of July 20th, an intelligent correspondent reviews the course of the Agricultural College of that State; and while we infer from his article that that institution is behind our Kansas Agricultural College somewhat, it shows that farmers and mechanics, all over the country, are in full accord with the sentiments we have expressed in THE FARMER, in regard to these institutions.

His letter, too, is another evidence that farmers and mechanics, throughout the land, are awakening to the importance of bringing these institutions to the sphere they were designed to fill.

Our country is losing millions of dollars annually for want of the instruction and information which these Colleges, properly conducted, would supply; and unless a change soon comes in their management, by Governors, Legislatures, and others having them in charge, we believe that farmers and mechanics will make it a test question in electing these officers. We have space for but two extracts:

When this institution was established, the farmer and mechanic naturally supposed that they, for whose special benefit the school was instituted, would have had the control of it; more especially as the colleges that had laid claim to a division of the funds had been defeated. But what was the surprise of the people, when it was found that three-fourths of the trustees, from some singular coincidence, were members of one religious denomination—four of them reverend gentlemen, and that a reverend gentleman, the head of an acknowledged sectarian college of a neighboring State, was selected to rule and manage this new school, in the interest of the industrial classes—a man whose long years had been spent isolated from the industries, and closely connected with sectarian theology and classic literature—a man who had the least possible sympathies with labor, other than to hold a fat office. If I am rightly informed, the object of thus getting control of this new institution of learning was twofold—one to give the polytechnic department to the University of Chicago, and the other to add to the influence of the denomination; but I am satisfied that the originators of the plan are now aware that they have made a practical failure, and for this the industrial classes may thank the press for its timely warnings.

Short-sighted or designing persons may say that, because a paper publishes such an article as the one from which the above is taken, or such as have appeared in THE FARMER and in other Agricultural journals, that they are gratifying some petty spite or jealousy, and degrade it by calling it a fight; but farmers understand that it is simply an earnest effort, upon the part of the Agricultural Press of the country, to secure the rights of the industrial classes. When these Colleges become Industrial Colleges in fact, they will not lack for students, nor will they lack for support; but as long as they are perverted, those having them in charge must expect to be told of the fact.

The correspondent alluded to expresses this fact forcibly, and in the following gives to Governors, who have the appointment of Regents, a hint they will do well to take:

I had supposed that this should have been a school in which all the sciences would have been taught in the most thorough manner; that its cabinets of art, its farm and ex-

perimental grounds, should offer ample lessons in all that pertains to a more practical demonstration; that the culture of forest trees—one of the first great needs of the country—would have been pursued to such an extent as to give valuable lessons; and if I mistake not, the second annual report promises this, for the Legislature was asked for \$7,000 for this purpose, and granted it; and now all we hear of this is, that the few thousand trees procured for this purpose form "a vast nursery," the trees of which are soon to be thrown on the market.

We have colleges of medicine, colleges of law, colleges of theology, and the farmer and mechanic should have a college where the leading features shall be to teach those sciences relating to Agriculture and the Mechanical Arts. But such a College will not succeed in the hands of preachers or professional men.

It is the duty of the Governor, in the appointing of Trustees, to see that the proper men are selected. If one will look over the list, he will be surprised at the small numbers directly connected with the industries. Some of these men own farms as a matter of investment, but the most of them have given the subject of industrial education little attention.

STATE FAIR ITEMS.

Under the above head, the *Topeka Commonwealth* has the following:

Geo. T. ANTHONY, of THE KANSAS FARMER, offers some very interesting premiums, to be awarded at the next State Fair. No. 1 is for the best twenty-five pounds of Butter—a \$40 Farm and Garden Library. No. 2 is for the largest collection of Cereals, grown in 1872, by one exhibitor—a \$40 Farm Library. No. 3 is for the largest and best display of Fruits, grown by the exhibitor—a \$40 Farm and Fruit Garden Library. No. 4 is for the best display of Grasses, including the Clovers—a \$10 Library. No. 5, for the best display of House Plants—a set of Dickens' Works. No. 6, for the best display of Cut Flowers—a set of Dickens' Works.

Competition will be spirited for these KANSAS FARMER Premiums. If books and periodicals relating to Agriculture and Horticulture, silver plate, medals, and other tokens, were offered as premiums, instead of cash, the influence would be most salutary. Cash premiums find their way in and out of the exhibitor's pocket, and that is the last of them. Not so with the other premiums named. They possess an interest and a value far beyond their intrinsic worth. They become household treasures, and wonderful incentives in families and among neighbors in making renewed efforts. We will venture that far more interest will be manifested in these premiums than if double their value in cash was offered.

In our opinion, the ideas of the *Commonwealth* upon the above subject are entirely sound. Money is a convenient thing to have around the house; but its value is not to be compared, in the relation spoken of above, to good Agricultural books and papers. It may be said that if the exhibitor gets a premium of \$5, he can buy his own books. True, but will he? Farmers need more Agricultural books and papers within reach of their children. An Agricultural library is as necessary as a law, theological or medical library; and the above is a good way to start them.

BUFF COCHINS.

We present our readers on the title page of this issue with an excellent engraving of a pair of Buff Cochins, belonging to Mr. D. C. M. EVANS, of Charleston, Illinois.

The engraving is an excellent likeness of a breed that is deservedly popular wherever known, being particularly good as Winter layers, good mothers, and of a quiet, home loving disposition.

The young chicks are hardy, of quick growth, and for table use are the best, to our minds, of any of the large breeds. The color of the cock is a rich golden buff, and that of the hen a clear, deep buff throughout.

MUCH OBLIGED.

We have recently been receiving large accessions to our subscription list, both in clubs and single subscriptions, and we take this opportunity to say thank you, to all those friends who have taken the trouble to send in names without hope of reward, and hope that THE FARMER may have the opportunity of returning the compliment.

We take this opportunity to say that it is impossible for us to recognize by letter, the receipt of subscriptions, unless there is something of special importance. The receipt of the paper is sufficient acknowledgment.

To those parties who wrote asking how money should be sent, we repeat that the money order is the cheapest and best. When this cannot be done, send by registered letter. Small sums usually reach us by the ordinary letter, but it is best to send by either of the other methods.

AWARDING COMMITTEES.

A private letter from the Hon. ALFRED GRAY, Secretary of the State Board of Agriculture, informs us that the Awarding Committees for the

State Fair have been selected, but their names will not be made public until the opening of the Fair. The gentlemen selected for Committeemen will be notified by letter of their appointment.

In our opinion, this is an excellent plan. Usually, the Committee is selected on the first day of the Fair, when everything is hurry and bustle, and but little attention can be paid to the especial fitness of the persons selected.

By selecting in advance, the State may be looked over, and parties chosen who are supposed to know more of a particular branch of the Fair, than others. It is a sensible move, and we commend the plan to County Fairs.

FAIR WARNING.

We desire to again call the attention of the fruit growers of Kansas to the premium of \$100, offered by the State Board of Agriculture, for the best and greatest exhibition of fruit at the next State Fair, open to any State, county, township or individual.

The premium is very liberal—well worth competing for; but the credit of being the successful competitor in such a contest is worth far more.

Our Kansas fruit men must understand, however, that it will be no easy victory, and there is danger that the State may lose it by inertia. Missouri will be there; Nebraska will be there, and probably Illinois will be there; and we call upon Kansas fruit growers to look to their laurels, or they will be routed—horse, foot and dragoons. Your competitors are at work. They mean business.

Some time ago we suggested, in these columns, that County Agricultural Societies organize for this "Fruit Campaign" at once. Let the fruit men in each county organization get together, and conclude upon a line of action. Have a large pyramidal form built, with ten or more tiers of shelves (as being the most economical of space). Have this beautifully decorated, and surmounted with a banner bearing the name of your county organization. Let the ladies assist in getting up beautiful decorations. Make this not only the feature of the Fair, but make it the grandest display of fruit ever made upon the continent. Nature favors us particularly this year, in the yield of all kinds of fruit; and a display commensurate with our capacity, in quality and quantity, would be worth thousands of dollars to the State, as a means of inducing immigration.

Shall we make the trial? Kansas, of all the States, justly wears POMONA'S crown, and shall we yield it without an effort? Such a course would be cowardly in the extreme. Let us have immediate organization in every county that has fruit trees in bearing. Let the project be worked up. Decide upon a line of harmonious action, and then prosecute it vigorously.

It should be remembered, too, that a premium of the same amount is offered, under similar circumstances, for the best and largest exhibition of vegetables. Our remarks above, in relation to fruit, are pertinent to this; and the exhibition of vegetables is equally important, and may be made as interesting as the fruit. Set the ball in motion.

NEW FRUIT.

The name of our friend, S. T. KELSEY, is as well and favorably known to nurserymen and orchardists of the West, as is the names of the fruit and fruit trees they cultivate; but it is news to us, and we presume it will be to them, to know that he has become the propagator of new fruit, as the following paragraph from the *Lawrence Tribune* would seem to indicate:

S. T. KELSEY, of Pomona, the fruitist, has been made the father of twin boys. At this rate, the Willow Twig will become a necessary variety on KELSEY'S place. You can't bring up boys without it.

We would suggest to friend KELSEY, the *Lumber Twig*, as better adapted to the exigencies of the case, and we may be permitted to hope, that the boys may grow and wax strong, and like their honored sire, live to beautify the prairies and valleys of Kansas, by growing fruit and forest trees, and the State will rise up and call them blessed.

AROUND THE CIRCLE.

We have, in turn, been amused, vexed, and disgusted, at the periodical appearance in agricultural and other papers, of certain items supposed to be of vital importance to farmers.

Every paper in the land seems to consider that it is omitting a bounden duty if they fail to publish, at least once a year, these important items.

We refer to these empty nothings, such as, "how to tell a horse's age by the wrinkles over the eyes," "how to keep eggs fresh the year round," "how to tell the sex of eggs," "how to start a balky horse," the "sure cures for sunstroke, snakebite, hydrophobia," and the infallible remedies for chicken and hog cholera, "how to make hens lay," and the thousand and one other items that contain but little sense, and are never read.

Some papers seem to make it a point to scan their exchanges for these items, when the fact is they could find them all, if their paper has been in existence six months, by referring back to their own files.

An agricultural item of the same length that has merit, that contains an idea to set men to thinking, has no charms for them, in comparison to these old fossils. To them they are the "flesh pots of Egypt," and like the boy after the woodchuck, "are bound to have them, as they are out of meat."

UNITED STATES SIGNAL SERVICE.

The Chief Signal Officer of the United States, at Washington, in a circular recently issued, cordially invites the co-operation of all Agricultural Societies, to the end that the usefulness of the Signal Service to the agricultural community, may be increased, and asks that each Society appoint a standing committee to confer from time to time, and to make suggestions to the Signal Service Bureau, as to how in their judgment, the efficiency of this service may be increased.

We have not as yet realized the benefits that may and will accrue from carefully prepared observations of the weather, but it will, in our judgment, eventually be of inestimable service to the agricultural world, as well as to commerce.

All letters addressed to the "Chief Signal Officer of the Army," and marked "Official Business," are entitled to go free of postage.

We recommend each Society to put themselves in communication with the office, through the committee above spoken of.

TO PRESERVE PEACHES.

GEO. HOBSON, Iowa City, Kansas, asks for a safe plan to put away dried peaches, so as to keep out the worms.

Take the ordinary flour sack, stretch it over a keg or other suitable object, and give it one or two coats of whitewash. When thoroughly dry, put in the peaches, tie closely, and hang in a cool, dry place. Does any one know of a better plan?

SALT FOR FRUIT TREES.

We find in an exchange the report of a gentleman who applied shell lime and salt to apple and pear trees, with decided benefit.

This is a subject that we have not practically tested, but we have seen the application of both these substances recommended so frequently of late, that we desire to warn our readers against the unlimited application of salt at least, to peach trees.

A prominent nurseryman and fruit grower near this city, applied a dressing of salt to a large orchard of budded peach trees, at the rate of three bushels to each two hundred trees, a year ago last Spring. The trees seemed to thrive last season, and the past Spring he applied another dressing of the salt, digging down slightly at the bottom of the tree.

About a month ago we were in the orchard, and found it well set with fruit, but every tree dying. The probabilities are, that not a single tree of the

two or three hundred will have sufficient vitality left to mature the fruit now on them.

This, not an argument against the use of salt on fruit trees, but teaches us to use it with caution, until more is known of its action, and we would recommend fruit growers to experiment as to the amount to be used and when to apply it upon trees of little value.

PATRONS OF HUSBANDRY.

We have received from an esteemed correspondent, a communication composed of extracts from the Constitution of the above Order, designed to set "Burr Oak" right (in our last issue), in regard to the fees, &c., that have to be paid by the members, and the proportion that goes to the State, or National Grange.

We have intended to publish the Constitution of this organization entire, that our readers might have an opportunity of judging of its merits or demerits, but have not yet found space to do so, but shall take the first opportunity, and hence, do not publish the article referred to.

We are not satisfied in our own minds that this organization is, or will be, of any practical benefit to farmers; in fact, we have a great distrust of an organization that is controlled (at present at least) by one man, no other name appearing in the papers or correspondence that emanates from Washington, except that of one O. H. KELLY. He may be an honest man, a good man, and all that, but at the lowest sum mentioned in the Constitution as being paid by each State Grange, to the National Grange, it amounts to a very large sum. Somebody gets that. Who is it? The State Grange is required to pay to the National Grange, the sum of ten cents per annum for each member in the State, and possibly a farther sum for each degree conferred (for the Constitution is not clear upon this point) and this, with the membership that is claimed for the order by its members, would amount to an enviable salary, for most men. Ten cents is a small sum for each member to pay, but every man should refuse to contribute to any purpose that tends to support men in idleness, or that does not promise a fair return to the donor. Until we know more than we do now of the financial management of this concern (and we have all the publications issued that circulates among outsiders), we cannot give it any personal support, nor recommend others to do so. We have not ten cents to give, to simply help to build up a ten thousand dollar salary for O. H. KELLY. If this organization has an existence outside of O. H. KELLY, they should make the fact known.

General News.

THE potato crop of Kansas promises to exceed any previous crop by many thousand bushels.

THE wheat crop of the State is turning out at least fifty per cent. better than was anticipated.

THE Baptist church of Paola, has received twenty accessions to its membership within the past month.

THE *Union* says that Humboldt is soon to have a large flouring mill and furniture factory. Why not?

A FARMER in Jackson county recently sold, from fifty sheep, two hundred and sixty-one dollars worth of wool.

CAPT. J. W. STEELE has been appointed business manager and associate editor of the *Kansas Magazine*.

THE Jackson County *News* reports several crops of Fall wheat in that county that average twenty-five and thirty bushels per acre.

FROM the Seneca *Courier* we learn that the Nemaha Agricultural Society has offered a liberal premium for the best farm in that county.

OSAGE CITY, Kansas, has a pottery established in that place, that promises to do a thriving business. The ware made is said to be of superior quality.

THE same paper states that the reported failure of the wheat crop in that county, is all a mistake. It says the yield in bushels will be as large as last year.

PARTS of Illinois, Indiana, and Ohio, have been passing through a severe drouth, and up to this date, July 15th, still continues. It has seriously affected the corn crop, and cut the oat crop short somewhat.

THE *Chief* says: "Six car loads of hemp were recently shipped from Troy, Kansas, raised principally by Norwegian farmers, on the high prairie west of that town. The price received was \$65 per ton."

THE farmers of Illinois are not an exception to those of most of the other States, in their determination to have an *Agricultural* school, or nothing, out of the Government land grant schools. The agricultural papers of that State stand by the farmers.

THE new Presbyterian church at Junction City, erected at a cost of \$14,000, was dedicated July 7th, and communion service held the same day, and received nineteen new members. The church was organized four years ago with but eleven members. They now number eighty-six.

THE St. Louis Agricultural and Mechanical Association have offered \$40,000 in regular premiums, and a large amount in special premiums.

THE Cotton Association offer \$10,000, and the premiums take a much wider range than ever before. The Fair is to be held nine days, commencing October 12th.

THE Leavenworth, Lawrence & Galveston Railroad in order to give aid to Agricultural Societies along their line, have issued a circular announcing their intention to carry all freight intended for any Fair, free of charge, and visitors attending any Fair, will be charged but one and one-fifth rates, for the round trip.

THE Leavenworth & Denver Narrow Gauge Railroad is now running regular freight and passenger trains to Grasshopper Falls, and are doing at good business. The rates charged for both freight and passengers are nearly one-half less than on any other western roads. This is a feature that will be appreciated.

HON. B. F. GUE has bought an interest in the *Iowa Homestead*, published at Des Moines, and becomes its managing editor. The *Homestead* under Gen. WILSON has been an excellent agricultural paper, and Mr. GUE, besides bringing a large amount of that stuff that it takes to run a paper—money—brings long experience as a journalist, and considerable experience in agricultural matters.

WILLIAM and GEORGE T. MATTINGLY, six miles north of this city, had fifty acres of wheat this season, which averaged—though badly injured by the severe cold of last Winter—about fifteen bushels to the acre. Of this, fifteen acres was Genesee White, which averaged twenty-five bushels to the acre. Mr. MATTINGLY thinks the Genesee White is the most profitable wheat to raise in the State—*Osage Chronicle*.

FROM the Junction City *Union*, we learn that in the past year in Davis county, there has been opened and improved, one hundred and twenty-five new farms and one hundred and fifty new farm houses built, and more stone fences have been built during the year, than any other kind. There was sown last year three thousand acres of Spring wheat, but only about one hundred acres of Fall wheat left standing this Spring.

A GENTLEMAN of this city recently sold to parties in Denver, Colorado, the young thoroughbred stallion, Archy, by Planet, dam, Virginia, for \$750.

He is a fine limbed, well built, chestnut sorrel, about 15½ hands high, and although having had but little training, gives promise of marking below

2:30. He was bred by Gen. MILES, Post Commander of Fort Leavenworth.

At the Saratoga races, Bassett beat Longfellow by a length, winning the cup. Time, 3:59.

One of Longfellow's shoe plates broke and twisted around, cutting his leg frightfully, and it is feared, ruining him for all future racing. At the Long Branch races, Longfellow beat Bassett so easily, that some were constrained to believe that his shoes had been tampered with at the Saratoga races, but this is probably incorrect.

Our Correspondents.

F. N. O., of King City, McPherson County, Kansas, writes: "I wrote you one year ago from this point. Then there were few settlers, now the land is all taken within five or six miles of town, and King City is thriving. We will soon have a printing office, Mr. H. A. HENDRY, of the firm of HILL & HENDRY, proposing to publish a paper. This firm has just erected a large, two-story building for general merchandise."

T. S. Holloway, Eureka, Kansas, takes exceptions to the plan we suggested in regard to planting forest trees, believing that it would benefit nursery men more than farmers, in that but few farmers can do any great amount of planting in one day, and suggests that the State Board offer premiums to the County Agricultural Society that plants the greatest number of acres, and that County Agricultural Societies in turn, offer premiums to farmers for acres of forest trees planted, rather than for the number of trees planted on a given day.

We think the suggestion a good one. Will our State Board take action in the matter?

C. N. Ordway, Hamlin, Brown County, Kansas, asks: "Is there a market for barley in your city, and if so, what price. Why don't your brewers advertise in THE FARMER? I would like to correspond with them."

We have four breweries in this city that make their own malt: C. KUNZ, J. C. GRUND & Co, BRANDON & KIRMEYER, SCHMITT & PEIP. These consume large quantities of barley during the malting season, which will not commence until about the 1st of September. The market will probably open about the middle of August, and the price will not vary far from fifty cents per bushel. At this price it is a paying crop.

J. H. J., of Bala, Kansas, wants a plan for a fence that is impregnable against all cattle, will not be injured by fire, and will not cost more than one dollar or one dollar and a half per rod, and has understood that the Fair Ground fence at Topeka fills the bill.

We do not remember in particular about the fence at Topeka, but do not believe it meets all the requirements, nor do we believe that any fence can be constructed that will. The hedge comes nearest, is emphatically the fence for the prairies, although it is liable to be injured by fire. The stone fence fails, in that it will cost from \$3.50 to \$4.50 per rod. We recommend J. H. J. to try the hedge.

W., of Geneva, Allen County, Kansas, "has three acres of Alsike clover put in with oats in April last, came up well and made a good start, but the dry spell in June checked its growth. Will an application of gypsum benefit it? If so, when and how should it be applied, and how much?"

"I desire to set an orchard this Fall, of 600 apple trees, raised from root grafts in the Spring of 1871. They are thrifty trees, but the tops of many of them lean to the north-east. Will it do to set in the orchard, reversing their position in the nursery, so that our south west wind may straighten the trees?"

In regard to the plaster, we think it would be advisable to sow it. Should it set in dry after sowing, it would do little or no good, but the season so

far has been very favorable for the action of plaster, and the probabilities are that it will continue so. It is usually better to sow in the Spring, but if it were our own case, we would sow one and one-half bushels per acre, now.

The difficulty with the trees can probably be corrected at time of setting, by cutting back the tops and using caution in setting the trees. We would not hesitate in changing the position of the tree if necessary.

H. F. Bryant, Independence, Kansas, knows something about beans, as follows: "If your correspondent will plant the white navy bean, on well cultivated land, sowing broadcast when the sign is in the arms in June, he will have plenty of beans. It is not so much in the soil. They drop the bloom, and after fifteen years experience, I know that the above plan will prevent this. Please tell me what time to lay down grape vines for cuttings."

There are different times and ways to do this. Laying the green wood may be done any time now. Simply bend down a shoot of this year's growth, and with a short thin bladed knife, cut through the bark and partly through the wood, splitting it upwards toward the end of the cane, for about an inch or two. Have your ground well spaded and pulverized. Place the vine in this earth at the cut end, covering with an inch or two of earth, and pin down with a forked stick, to keep it in place. The end of the cane is to be left out and may be tied to a stake. When well rooted, cut from the parent vine, and remove. There are other and better methods, but mention this as it is seasonable. If Mr. BRYANT will send us \$3.50, we will send him BARRY'S Fruit Garden, that gives full and explicit directions upon all matters pertaining to fruit culture.

Charles M. Frost, Crawford County, Kansas, under date of July 7th, writes: "At this date we are done harvesting, and have a very fair crop of wheat. Oats are good, with splendid prospects for corn. The chinch bugs have but recently made their appearance. Can any one tell us through THE FARMER the cause of bloat, and what will cure it? Upon the advice of a neighbor, we stuck a knife in the flank, but it did no good."

If our correspondent means Hoove, Hoven, or Blown, as it is called, it is caused by eating so much wet grass, or clover, or other luxuriant vegetation, as to impede or stop digestion. From this gas accumulates. The knife used as spoken of, generally gives relief. A goose quill should be inserted after the incision is made through, to permit the escape of gas, otherwise it will close so tightly as to give but partial relief. The animal should also be drenched with either of the following:

Spirits of hartshorn, one ounce; water, one quart. Or, salt, two tablespoonfuls; water, one quart.

The first named is the best, but both may be used. It is perhaps best to say, that in using the knife, a small sharp blade should be used, and the cut is cautiously made, holding the finger well down on the blade, so that it shall simply go into the hollow, and not penetrate the intestines, at a point midway between the last rib and the hip bone, and just about twelve inches from the center of the backbone. Then insert the quill and hold in position until the gas has escaped.

H. A. Stiles, Pavilion, Wabaunsee County, Kansas, one of the largest sheep raisers in the State, writes to know what it is killing his sheep. There is no mark of violence, and has discovered no symptoms of disease, except frothing at the mouth. Thinks it must be some poisonous plant, and asks us to describe the poisonous plants of his section.

This we could not do, as we do not know what plants are indigenous to that section. If friend STILES will gather such plants as he does not himself know, within his sheep range, taking the smallest specimens, roots and all, press them for three or four days, then fasten them securely between two pieces of card board and mail them to

us, we will name them, and can then tell him which are poisonous and which are not.

The same correspondent, in another letter, says: "Wheat and oats mostly cut, and Spring wheat good. About enough of Fall wheat for seed. Oats are better than ever before. Corn promises ditto. Fruit in abundance. None of the tame grasses nor clovers grown yet. Will those who have had experience tell us something about them in THE FARMER? Their failures or successes, and how and when to sow?"

"Had we tame pastures or meadows, it would add millions to the wealth of Kansas. It would give a new impetus to stock raising, improve the butter and cheese, and make our pastures almost if not quite perennial. I have been experimenting for a year or two on a small scale, but I wish to hear from those of more extended experience."

Mr. STILES's ideas are sound, and we wish that thousands more of our farmers were possessed with them. Clover and the tame grasses are our greatest need. They have been proved to be well adapted to both soil and climate. Let us hear as to the best time to sow and how.

Our Boys and Girls.

ANSWER TO A BOY'S LETTER.

A young friend who lives at Monrovia, Kansas, and who is a fast and firm friend of THE FARMER, writes to say that they have organized a Kansas Farmers' Technical Society, or something similar, of about twenty-five members, and asks our advice as to the most pleasant and profitable manner of conducting their meetings, as they have not much knowledge as to how it should be conducted, and asks if a small library would not be a good thing, and also wants to know the best method of keeping order.

We do not know as we can give our young friends any more explicit directions than we did in the other article. We think a small circulating library would be a splendid thing, if the boys and girls (we suppose some of the members are girls, they ought to be) can devise the ways and means to get it. If each member could become the owner of two or three hens, and would take good care of them, by Fall or early Winter, they would lay eggs enough to buy—well let us see. August, September, October, November—one hundred and twenty days; in that time, a good hen ought to lay two dozen eggs. If each one has four hens, that's eight dozen eggs, or two hundred dozen for twenty-five members, which at ten cents a dozen, would amount to twenty dollars, which will buy a nice little library. But there is one trouble with this plan. Just about this season of the year, the hens are molting, and while the new feathers are growing, they don't lay very regular, and the first eggs might spoil before you could get enough to go to market. Maybe you could make an arrangement with your father or mother to buy them from you as they are laid; or, perhaps you can devise some other and quicker plan for earning eighty cents or a dollar.

At any rate, sooner or later, we advise you to get a library, and hold a meeting every week at some convenient place, and bring back the book you already have, and get another, and in this way the library will do you as much good as if each one owned twenty dollars worth of books. This is what is called a circulating library. From these books you can learn questions to ask and answer, as we told about before.

If you have no opportunity to come to buy the books for yourselves, and will send the money to us in a registered letter, with the names of the books you want, we will buy them for you, and I guess we can get them cheaper for you than you can for yourself, or if you do not know what kind of books to buy, and will trust to our judgment, we will do the very best for you we can.

Now that question about keeping twenty-five boys and girls still, is a puzzle. We've got only six at our house, and we can't and don't try to keep them still; but when boys and girls go into a society like this, they should pledge themselves to obey all the rules, and a boy or girl that will break a pledge of that kind, will never make a good member, and had better be expelled. We hope our young friends will get together and read this article over, and see if they cannot fall upon some plan to start a library, and if THE FARMER can help you any more, just let us know.

LIKES KANSAS.

BY LIZZIE B. KINNE.

EDITOR FARMER: I see so many letters in THE FARMER from the boys and girls of Kansas, and as none of them are written by persons of this vicinity, I thought I would write and tell you how I like Kansas. I am ten years old, and was born in Bushnell, McDonough county, Illinois. One year ago the twenty-first of last December, we started for Ottumwa, Coffey county, Kansas, where we spent the Winter and part of the Spring, until the month of May, when we moved to Arkansas City, Cowley county, Kansas, a distance of one hundred and forty miles, where we have since lived until two weeks ago yesterday, when we moved here on our claim, four and a half miles from town. Arkansas City is a beautiful town, situated between the Big Arkansas and the Walnut rivers, and is a very pleasant place to live, but I believe I prefer the farm, although our improvements are but little as yet. Pa has about seventy acres broke, and is going to have his hedge row broke this season, and I don't know how much more. I have a little pony and am learning to ride. This is not a very long piece, but I will try and write more next time. Please excuse all mistakes.

THE FOURTH OF JULY.

BY ANNA GRAVES.

EDITOR FARMER: I see so many of the boys and girls writing, I thought I would write some. I will tell you about the Fourth of July up here.

Our Sunday School (which is called the Pleasant Grove) was invited over to Coal Creek to spend the Fourth. All the Sunday Schools met at our house in the morning, and started at 8 o'clock. All the girls had on blue sashes tied on the left shoulder. The boys had red, white and blue ribbons tied in their button holes. The first wagon was covered with a large flag, and contained fifteen of the best singers. The next wagon contained fourteen little girls, and the rest were the parents and friends, making fourteen wagons in all. All the company moved out to about one and a half miles west, where we met our worthy Sunday School Superintendent. There we halted and gave him three loud and animated cheers, and then went on. We had singing and speaking on the grounds, with two other Sunday schools. We had a very pleasant time, and all returned home feeling happy.

Pleasant Grove, Kansas.

THE FLOWER GARDEN A FAILURE.

BY ALICE STIGERS.

EDITOR FARMER: I tried very hard this Spring to raise flowers, but between the chickens and the baby, they were nearly all destroyed. I am trying to make an arbor. I planted enough vines around it to make a dozen arbors, but they are all dead now, except one maderia or woodbine, and three or four Virginia creepers.

Our Sabbath School had a picnic down at Timber Ridge, about three miles below here, on the Fourth. I was there and had a good time. We had all the ice cream and lemonade we wanted, and a nice swing; but better than all we enjoyed a speech from the Editor of THE FARMER. I like THE FARMER better than ever since I have seen its editor.

I don't much like the name I have given my

home, and I wish that young man that wrote such nice letters from "Prairie View," would suggest a prettier one. "Idlewild" is very pretty, but people might think I was both idle and wild, and I don't believe I am either. I have helped to raise nearly two hundred chickens this Spring, and might have raised as many more if we had let them alone. But I guess this is enough for once.

Rose Cottage, Leavenworth County, Kansas.

THE HOG: ITS DISEASES AND TREATMENT; WITH SOME OBSERVATIONS UPON ITS BREEDING AND MANAGEMENT.

CHAPTER VII.—DISEASES OF HOGS.

(CONTINUED.)

Measles cannot be called a skin disease, but it is one that in process of development affects the skin, secondarily; and hence, we class it with the above.

Measles, as a disease of the hog, has not attracted the attention from breeders that its importance and frequency deserves; and consumers, in buying, pay too little attention to a matter that seriously concerns the health of the family.

The name is calculated to mislead, as it is an entirely different disease from the rubeola that children are subject to, comes from different and more disgusting causes, and is neither contagious nor infectious.

The cause of measles in hogs is from small worms, or entozoa, that by some means reach the cellular tissue, immediately under the skin, and are supposed to be the tapeworm in embryo.

Mr. HARRIS, we think improperly, considers inbreeding as one of the inducing causes. His other reasons, or causes, are, we think, the true and only ones, viz: Eating raw meat, such as rats, dogs and cats, and perhaps horses, that are killed and left in their way; or eating the droppings of other hogs already affected with measles or tapeworm.

Probably the only source of tapeworm in the human family is through eating infected pork; but the disgusting nature of the disease is sufficient, without the threatened terrors of contracting tapeworm, to induce every breeder to see that every affected hog be promptly and effectually treated, or at once knocked on the head, and its carcass divided and buried in the corn field or the orchard, or else used for soap grease.

The prominent symptoms of the disease are sluggishness, febrile symptoms, loss of appetite and an irruption on the skin, or rather under it; for we have never seen a case where the surface of the skin showed the pustule that Mr. HARRIS speaks of, but cannot say that it does not occur.

We have examined quite a number of cases, in all of which it seemed to be a small, red protuberance, as of something below, pushing it up. The pimples are unevenly distributed over the body, predominating, we think, along the sides between the ham and shoulder.

After death [it is not uncommon, throughout the country, to see fattening hogs killed that are affected with measles, and the meat disposed of with the rest—which practice we prefer to attribute to ignorance rather than avarice] the fat next the skin has a mottled appearance, the spots of a purplish hue, with no well-defined margin of color.

We do not know that this disease can be radically cured, to accomplish which not only must the embryo, which is the immediate cause of the disease, be destroyed, but the tape-worm, which is the remote cause, must be expelled from the system.

In the human family, turpentine, given in large doses, has long enjoyed a high reputation for expelling tape-worm; and the probabilities are that it would have a similar effect in the hog, and as it is readily and rapidly absorbed in the system, it would likely destroy the entozoa.

Had we a case to treat, we would give to a hog

of one hundred pounds weight, two table-spoonful of turpentine each morning, for three or four mornings in succession, using a little milk, thickened with bran or meal, or otherwise drenching the animal from a bottle. We would follow this with a quarter of a pound of salts each day for two or three days. Sulphur, copperas and other medicines have been recommended in this disease; but we would expect little benefit from their use.

CHAPTER VIII.

INTESTINAL DISEASES.

The next class of diseases to which we shall refer, are those which affect the stomach and bowels; a class of diseases that cause a greater loss of life among the swineherd than any other; and hence, the most important for us to consider.

The first of these that we shall consider is WORMS.

There is, perhaps, no animated existence that is troubled to so great an extent, or with so many varieties of worms, as the hog. Although savoring somewhat of quackery in principle, it is yet almost safe to say that, when your hog is sick, and you cannot tell what is the matter, *doctor for worms*.

First, then, is the tape-worm, just spoken of, that afflicts hogs to a considerable extent, but may not certainly be known save by seeing sections of it passed in the excrement.

The principal symptom is a gormandizing appetite, without corresponding improvement in flesh. It attacks old hogs, principally, and is a troublesome complaint.

The treatment is given in the preceding chapter.

Another, but less troublesome worm, is the one known as the round worm. This one is usually about the size of a small goose-quill, and six or seven inches in length. It is of a brownish color, and somewhat corrugated. It rarely produces any external symptoms that can be noticed; but we have no doubt that it retards growth, and its dislodgment should be effected, if possible.

Probably the most effectual remedy that can be used is santonine. This is the active principle of the plant called Jerusalem oak, or worm-seed, and is the base of all the vermifuges. It is usually very prompt in its action, and may be given in doses of one-third of a teaspoonful morning and evening, for two or three days, and following with a brisk cathartic, such as calomel, in teaspoonful doses.

European Correspondence.

OUR PARIS LETTER.

Rainy Weather—Injury to the Vineyards—No Flies in Paris—The New Military Law—The Model Farm School Self-Supporting—The Cattle Plague—Curing Hay, &c., &c., &c.

PARIS, FRANCE, July 12th, 1872.

An unnatural continuance of cold, of rain, and the absence of sunshine, have already told upon the farmers' prospects seriously. In this, the "leafy month of June," the sky continues overcast, the air is humid, one time very hot, another very cold. The wheat crop suffers from rust and rank, choking weeds, and the flowering period is occurring under the most unfavorable circumstances. Hay has to be made while the sun does not shine. In fifteen departments the vineyards have been more or less injured by the late frosts, although proprietors have resorted to the old plan of burning tar or naphtha during the clear, cold nights, to produce artificial clouds to rest as a canopy over their choicest vines. In the department of the Cher, most singular, the farmers complain of the drought, while their neighbors lament the deluge. In some localities, exempt from insects since ten years, the vermin have returned, and from the ravages they are committing, making up for their absence. In other places—Paris and vicinity, for instance—the common fly has become a curiosity.

Then, the political situation is bad. The agri-

culturist is essentially a man of peace; he pays his taxes, after having his growl, like every one else; but he asks in return security and tranquility.

Again, there is the new military law, by which every able-bodied man from twenty to forty years of age must become a soldier, with the liability to serve five years on active duty. Agriculture will, of course, have to support even the bulk of this tax; but only demands in exchange that the soldier, on resuming civil life, shall not have contracted a distaste for rural work, by immigrating to the large towns.

Mettray is the penitentiary where France sends those of her youthful criminals who are more unfortunate than culpable. In addition to the success of the reformatory principle, the tax payer ever kept a jealous eye on this typical establishment, to ascertain that not only were the juveniles employed, but employed advantageously. It is not a prison, since the inmates are not enclosed within walls; it is a model farm school. After a standard laid down for debiting each cultivated acre with the value of boy-labor bestowed, the net profit of the establishment, in cash, for 1871, was 30,000 frs.; thus showing that these kinds of experiments can be made self-supporting. The Director of Mettray has found it to be more profitable to consume beet, rather than send it to the distillers. The roots are cut, mixed with balls of wheat or oat meal, a little salt added, and the mass allowed to ferment. It is thus one hundred and fifty head of cattle are rapidly fattened, and the grain of the meat found to be exceptionally excellent. As a fallow crop, and an admirable preparation for wheat, kidney beans are extensively cultivated. Owing to a dry Spring fifty acres of clover failed, so that the practice of depending on one forage plant exclusively has been given up. The wise merchant never embarks all his fortune in one ship. The fodder is consumed green, and in the stall. For the very young lads there is the kitchen garden, which involves an expense of 640 frs. per acre—the returns just covering the outlay.

The cattle plague is not so violent, but still retains its hold on the north of France. About 150 animals per week are officially reported under the heads of the dead, slaughtered, ill or suspected. This is about the state of affairs in March last. However, no confidence can be placed in the official figures; the French themselves disbelieve them. Slaughtering the affected cattle, carefully burying the bodies, destroying every disease-germ where such may be suspected, and isolating affected districts—these are the only measures found to be efficacious. In Russia, where the plague is endemic in the cattle districts, the government has renounced the experiments it had ordered to be undertaken on the subject of inoculation—finding the method failed as a preventive.

France is rapidly giving up the old and defective plan of making hay by the continual turning of the grass till each leaf is directly dried by the sun. Under a clouded sky, but with the air dry and warm, the grass gradually parts with its tissue-water, and requires but little turning over to arrive at the necessary dryness for being ricked. Too much shaking affects the color and the aroma of hay—two marketable qualities sought after. Further, the plant loses much of its leaves and flowers by the shaking process, and Pierre has demonstrated that these are the parts of the plants richest in nitrogen.

These remarks apply where clover or lucerne may be in question. In Flanders, after the clover is cut it is allowed to remain a few hours in the sward to *die*; then it is made up into sheaves more or less bulky; these again are united into circular stooks, and the conical top hooded by a sheaf. The forage dries well in this position, and can resist the rain for several hours; the leaves are not shaken away, as in the present plan. A few hours before being carted off the field, the sheaves are opened, when all dampness disappears. Should the weather

prove persistently wet, the stooks should be changed from time to time, to avoid bleaching the aftermath. The "Klapmeyer" process demands tact, prudence and fine weather. When the clover is cut, it is gathered into large cocks and compressed with care; fermentation ensues, and much heat. After two or three days the cocks are opened, the forage dried; then put up in cocks again for a new fermentation; afterwards opened, dried and ricked.

OUR CORNER

The Kansas Farmer Special Premiums.—The above Premiums, to be competed for at the State Fair, promise to form an interesting feature; and we can assure competitors, especially in Fruits and Cereals, that the competition will be sharp, and the winner will have no easy victory. For the interest of Agriculture, we hope it may be so. Competition is the life of trade, and the sharper the better. Bring out your big apples, peaches, pears and grapes; your fine corn, wheat, oats, rye, barley, buckwheat, &c.; and your clover, timothy, red top, orchard grass and blue grass. Let the display be worthy the State.

Back Numbers of The Farmer.—GEO. E. LOWRY, Box 993, Topeka, Kansas, writes us that as he is compelled to leave the State, he will be pleased to donate to any subscriber of THE FARMER any of last year's numbers, or any of the numbers of the present volume, that they may need to complete their files. Those who have written to us upon this subject can accept Mr. Lowry's very kind offer, enclosing postage. We cannot supply any perfect sets of either last year or this.

Complimentary.—We are under obligations to D. C. M. EVANS, Secretary of the Coles County (Ill.) Agricultural Society, for a complimentary ticket to their Fair, to be held at Charleston, September 10th to 14th, inclusive. Also, to A. M. GARLAND, Secretary of the State Agricultural Society of Illinois, for a complimentary ticket to their State Fair, to be held at Ottawa, La Salle county, September 16th to 21st, inclusive.

Sales of Berkshires.—We have received, too late for insertion in this issue, from Maj. J. K. HUDSON, of Wyandotte county, a list of his late sales of Improved Berkshires. From the long list sent (thirty-five head) we see the Major is doing a "land office" business; and from personal observation we can say that there is no better herd of Berkshires in the country than that now owned by Maj. HUDSON.

Unanswered.—We are in receipt of quite a number of very interesting questions and communications, that we are compelled to lay over until our next issue. Our Veterinary Editor writes us that he has been so fully occupied with his harvest, and other farm duties, as to be unable to answer quite a number of queries now in his hands. He will probably be able to reach them in time for next issue.

The Oak Leaf.—The genuine Charter Oak Stoves have an oak leaf on the side doors, and are stamped with the name of "GILES F. FILLBY, St. Louis." When buying one of them, therefore, look out for these proofs of genuineness, and reject all that do not have them.

What's the Name?—If our correspondent N. W., or N. P., Tonganoxie, Kansas, will send his or her name, he or she will be enlightened on the subject-matter of his or her letter. It is not in good taste to write anonymous letters to papers.

BOOKS AND PAPERS.

The Kansas Magazine for August is received, and contains abundant matter for thought. It is solid. Indeed, we are not sure that there is not too much roast beef for the supply of pies, puddings, and piquant sauces. The single article on the Eight Hour Movement, by FRED. LOCKLEY, is worth a year's subscription, to every reader who will read to understand it. It goes to the bottom of the question, and holds it up in its true light; shows just where the friction is between labor and capital, and shows laboring men just how the oil is to be applied, to remove the harsh, grating, grinding point between the two classes. It should be read.

The workmanship upon the Magazine is, as usual, exceptionally good, and does not suffer by comparison with Eastern contemporaries.

Saturday Night: Cincinnati, Ohio; \$2 per annum. This is the name of the new paper recently started by A. M. GRISWOLD, better known as "The Fat Contributor," and respectfully dedicated to "the good-natured public." It is a paper that will be acceptable to the average American household, containing abundant intellectual food for each and every member of the family. Send for specimen copy.

Scribner's Magazine for August is unusually good, and should have a warm welcome in every household that desires for its children interesting and instructive literary, scientific, historical and biographical matter. It is the peer of the best. For sale by all newsdealers.

"WHERE THE LAUGH COMES IN."

"A little Nonsense, now and then,
Is relished by the wisest men."

JOSH BILLINGS says: "There is a grate deal of raw bliss in gittin' married."

A GERMAN lately married, says: "It vas yooost so easy as a needle could walk out mit a camel's eye, as to got der behindt vord mit a woman."

LEGAL ADVISER (speaking technically)—"In short, you want to meet your creditors?"
Innocent Client.—"Hang it, no! Why, they're the very people I'm most anxious to avoid."

A GOOD colored deacon was praying for the recovery of a sick sister, and ended in this way: "Oh! Lord, help her! Oh! Lord, make her well! Oh! Lord, if you can't make her well, then, oh! Lord, help her to grin and bear it."

A PARTY of young gentlemen dined sumptuously at a restaurant, and each one insisted on paying the bill. To decide the matter, it was proposed to blindfold the waiter, and the first he caught should pay the bill. (He hasn't caught any of them yet.)

"I GOT them sans ges home," said an aggrieved purchaser, "without getting bit, and I cut them apart and left them. In the morning I visited them. Three of them had cuddled up together and were sleeping sweetly. Two of 'em had crawled to my milk pail and were lapping the milk, while one, a black and white one, I found on the back fence trying to catch an English sparrow. I drowned the whole lot."

A VERY finely dressed lady on whose face powder and wrinkles were desperately struggling for the mastery, got on a train at Norwalk lately. The car being crowded, she was obliged to stand up. Seeing her, a young woman in an adjoining seat rose and offered the place. "But you will have to stand," said the first lady edging toward the seat. "Oh, that's nothing," said the other, "I am young." In the next instant, the first lady was at the other end of the car, and didn't intimate to anybody to bring the seat along.

TAPPAHANNOCK WHEAT for SEED.

TEN CONSECUTIVE YEARS' EXPERIENCE ONLY confirms the opinion of the superiority of this Wheat for our climate and soil. It is a Winter Wheat, smooth headed, white, ripens early, large and usually very plump grain, very heavy. It is also very hardy, standing our Winters well, and brings the highest price.

I will furnish it this year, in quantities to suit (to the extent of my crop, 400 or 500 bushels), delivered at the (Mo.) Pacific Railroad, at \$2.00 per bushel. New seamless cotton sacks furnished at cost—about 40 cents. Cash must accompany orders. Can ship by express, but advise parties to have it sent by freight, for economy. I furnish seed of my own growing only. Address: **T. E. ALLEN,** Aug 1-3m Allenton, St. Louis County, Mo.

MARKET REPORTS.

CORRECTED TO JULY 25TH, 1872.

APPLES—Abundant. Retailing at \$1.20@1.50 per bushel.
BRAN—Sacked, no change—90c@1.00 per cwt.
BUCKWHEAT—None in market.
BARLEY—No demand. Market will probably open at 50c per bushel.

BUTTER—No change in price since last report. We quote prices 10 to 15 cents for all low grades, and 20c@25c for prime.
CORN—Maintains the recent advance—38c@35, wholesale; 40c@45c from the stores.

DRIED FRUIT—But little in market.
EGGS—In limited supply, at 15c@18c.
FLOUR—Fall wheat, \$4.25@5.25 per 100 lbs, retail.
HIDES—Green Salted, 10c@10½c; Flint, 20c@21c.
LARD—Wholesale, 8c@9c; retail, 10c@12½c.

POTATOES—New, in full supply and of excellent quality. We quote prices at 40c@50c, wholesale; 50c@60c, retail.

POULTRY—Wholesale, \$2.00@2.50; retail, \$2.25@2.90.

WOOL—Still continues dull, owing to the unwillingness of manufacturers to enter the market at present prices. They are buying sparingly of foreign Wools, to keep their mills running, hoping that native Wools will decline. Holders do not seem inclined to make any concessions from the present prices. From a private circular from Boston to the Detroit

Advertiser, it seems that the estimate of the Department of Agriculture as to the Wool clip of 1869, was 70,000,000 lbs short of the actual amount. We quote prices same as at last report, to-wit: Tub washed and picked at 60c@65c; tub-washed, 58c@63c; fleece-washed combing, 50c@55c; fleece-washed merino, fine, 40c@45c; fine grades of tub-washed combing wools, 75c@90c.

WHEAT—Fall, old crop, \$1.50@1.55; new, \$1.20@1.30, at St. Louis; Spring, \$1.00@1.10.

OATS—20c@25c. RYE—40c@50c.

CATTLE—Natives are in light supply in the St. Louis market, and none but first-class Texans can be sold. We quote prices in that market as follows: Extra to prime choice Natives, \$5.75@6.00; 1,200 to 1,300 lbs Cattle, \$5.00@5.50; fair butchering Cattle, \$4.50@4.75; Texans, \$2.00@3.50.

ELGIN WATCHES!

FACTS FOR THE PEOPLE!

OFFICE GENERAL SUPERINTENDENT ERIE RAILWAY,
NEW YORK, February 7th, 1870.

T. M. AVERY, Esq., Pres't National Watch Co., Chicago, Ill.:
DEAR SIR: Having for three months tested, in various ways, the "time-keeping" qualities of one of your Elgin Watches, I most cheerfully award it the praise that is its due. For one month the Watch was carried by one of our Locomotive Engineers, and since then by different persons, so that its full value as a time-keeper could be known under different modes of treatment. I will simply say that it has given perfect satisfaction; and in my opinion is as near perfection as I believe it possible a Watch can be made.
Respectfully, yours,
L. H. RUCKER, General Sup't.

AMERICAN MERCHANTS' UNION EXPRESS CO.,
CHICAGO, February 17th, 1870.

T. M. AVERY, Esq., Pres't National Watch Co., Chicago, Ill.:
DEAR SIR: It gives me pleasure to state that the two or three Elgin Watches I have at different times purchased for presentation, have given entire satisfaction, and are highly valued as elegant and correct time-keepers.
A very large number of your Watches are being carried by the Messengers in the employ of this Company, and are giving entire satisfaction,—their time-keeping qualities being implicitly relied upon.
CH. RLES FARGO, Sup't.

OFFICE GEN'L SUP'T C. & N.-W. RAILWAY,
CHICAGO, February 16th, 1870.

T. M. AVERY, Esq., President National Watch Company:
DEAR SIR: I have pleasure in expressing my opinion of the Elgin Watches—the more so, since I do not think that there is a better Watch made. A large number of them are in use by our conductors and engineers, and other employees, and I have heard no dissension opinion upon their merits. They run with a smoothness and uniformity fully equal to any other Watch that I know of, and justify all your claims of excellence in manufacture and fitting of parts.
Yours, truly,
GEO. L. DUNLAP, Gen'l Sup't.

CHICAGO & ALTON RAILROAD COMPANY,
CHICAGO, January 25th, 1870.

D. W. WHITTLE, Esq., General Agent National Watch Co.:
DEAR SIR: I have carried one of the Elgin Watches for some time, and am much pleased with it. It has kept excellent time under all circumstances, and I consider it perfectly reliable.
Yours, respectfully,
J. C. MCMULLEN, General Sup't.

LAKE SHORE & MICHIGAN SOUTHERN R. R.,
CHICAGO, January 27th, 1870.

T. M. AVERY, Esq., President National Watch Company:
DEAR SIR: I have carried the Elgin Watch long enough to be able to pronounce it a first-rate time-keeper. I am making a very careful test of its performance, and will soon give you the results. I think it will show that the West can produce Watches equal to the manufacture of any part of the world.
Yours, truly,
E. B. PHILLIPS, Pres't L. S. & S. M. R. R. Co.

OFFICE GEN'L SUP'T UNION PACIFIC R. R.,
OMAHA, NEB., December 16th, 1869.

HON. T. M. AVERY, Pres't National Watch Co., Chicago, Ill.:
DEAR SIR: During the months that I have carried one of your B. W. Raymond Watches, it has not failed to keep the time with so much accuracy as to leave nothing to desire in this regard.
For accuracy of time-keeping, beauty of movement and finish, your Watches challenge my admiration and arouse my pride as an American; and I am confident that, in all respects, they will compete successfully in the markets of the world with similar manufactures of older nations. They need only to be known to be appreciated.
Yours, most respectfully,
C. G. HAMMOND, General Superintendent.

**VARIOUS GRADES AND PRICES MADE,
TO SUIT DIFFERENT TASTES.**
NO MOVEMENTS RETAILED BY THE COMPANY.
Call on your Jeweler, and ask to see one of the Elgin Watches. Business Office and Salesroom of National Watch Company, corner of Green and Washington streets, Chicago, Illinois. my1-6m



**STANDARD
Cane Machinery,**
For Sorgo and the Sugar Cane.
THE ONLY RECOGNIZED
standards in Cane Machines are
THE COOK EVAPORATOR
AND
THE VICTOR CANE MILL.
There are of these Machines
MORE THAN 31,000 IN USE!
They have taken the
FIRST PREMIUMS AT 117 STATE FAIRS.
Send for Descriptive Catalogue and Price List.
BLMYER, NORTON & CO., Cincinnati, O.,
Manufacturers of Cane Mills and Evaporators, Farm, School
and Church Bells, Buckeye Thresher, Feed Cutters, Corn
Shellers, Corn and Cob Crushers, &c. jy1-

The Largest Manufactory of Threshing Machines in the U. States Over 1000 Made and Sold Annually.
J. I. CASE & CO.,
Racine, Wisconsin,
MANUFACTURERS OF IMPROVED
THRESHING MACHINES,
With Steam Mounted and Down Horse Powers.
PORTABLE ENGINES, OF OUR OWN MAKE. ALL Machinery warranted. Call on our Local Agents in any of the towns in the West, and ask for pamphlet, or look at Sample Machines. We are making a new style of Machine, without Apron. Send for illustrated pamphlet, sent free by mail. jcl-8t-140

RESTORE YOUR SIGHT.



OLD EYES MADE NEW.

All diseases of the Eye successfully treated by
Ball's New Patent Ivory Eye Cups.
Read for yourself and restore your sight.
Spectacles and Surgical operations rendered useless. The inestimable Blessing of Sight is made perpetual by the use of the new
Patent Improved Ivory Eye Cups.
Many of our most eminent physicians, oculists, students and divines, have had their sight permanently restored for life, and cured of the following diseases:
1. Impaired Vision; 2. Presbyopia, or Far Sightedness, or Dimness of Vision, commonly called Blurring; 3. Asthenopia, or Weak Eyes; 4. Sore Eyes—specially treated with the Eye Cups—cure guaranteed; 5. Weakness of the Retina, or Optic Nerve; 7. Ophthalmia, or Inflammation of the Eye and its appendages, or imperfect vision from the effects of inflammation; 8. Photophobia, or Intolerance of Light; 9. Overworked Eyes; 10. Mydesopia—moving specks or floating bodies before the eyes; 11. Amaurosis, or Obscurity of Vision; 12. Cataracts, Partial Blindness, the loss of sight.
Any one can use the Ivory Eye Cups without the aid of doctor or medicine, so as to receive immediate beneficial results and never wear spectacles; or, if using now, to lay them aside forever. We guarantee a cure in every case where the directions are followed, or we will refund the money.
2300 Certificates of Cure.
From honest Farmers, Mechanics and Merchants, some of them the most eminent leading professional and business men and women of education and refinement in our country, may be seen at our office.
Under date of March 29, Hon. Horace Greeley, of the New York Tribune, writes: "J. Ball, of our city, is a conscientious and responsible man, who is incapable of intentional deception or imposition."
Prof. W. Merrick, of Lexington, Ky., wrote April 24th, 1869, "Without my Spectacles I can see you this note, after using the Patent Ivory Eye Cups thirteen days, and this morning perceived the entire contents of a Daily Newspaper, and all with the unassisted Eye."
Truly am I grateful to your noble invention, may Heaven bless and preserve you. I have been using spectacles twenty years; I am seventy-one years old.
Yours truly,
PROF. W. MERRICK.

REV. JOSEPH SMITH, Malden, Mass., cured of Partial Blindness, of 18 years' standing, in one minute, by the Patent Ivory Eye Cups.
E. C. ERLIS, late Mayor of Dayton, Ohio, wrote us Nov. 15, 1869; "I have tested the Patent Ivory Eye Cups, and I am satisfied that they are good. I am pleased with them; they are the greatest invention of the age."
All persons wishing for full particulars certificates of cures, prices, &c., will please send your address to us, and we will send our Treatise on the Eye, of 44 pages, free of charge, by return mail. Write to
Dr. J. BALL & CO.,
P. O. Box 957, No. 91 Liberty Street, New York.

For the worst cases of MYOPIA, or NEAR SIGHTEDNESS, use our New Patent Myopic Attachments, applied to the IVORY EYE CUPS, has proved a certain, sure cure for this disease.
Send for pamphlets and certificates—free. Waste no more money by adjusting huge glasses on your nose and disfigure your face.
Employment for all. Agents wanted for the new Patent Improved Ivory Eye Cups, just introduced in the market. The success is unparalleled by any other article. All persons out of employment, or those wishing to improve their circumstances, whether gentlemen or ladies, can make a respectable living at this light and easy employment. Hundreds of agents are making from \$5 to \$20 A DAY. To live agents \$20 a week will be guaranteed. Information furnished Free of Charge. Send for Pamphlet, Circulars and Price List. Address
DR. J. BALL & CO.,
Oculists, P. O. Box 957, No. 91 Liberty St., New York. aug1-2t-19t

BEE-KEEPERS, ATTENTION!
ITALIAN BEES AND QUEENS, BEE HIVES, WITH Comb Guide, sure to secure the combs straight in the Hive. Honey Extractor cheaper than Eastern patent machines. Alsike Clover Seed, the great honey and hay plant; and Seeds of other honey plants. Bee Books and Papers. Send for Circular and Price List. Address
feb15-tf **NOAH CAMERON, Lawrence, Kansas.**

QUINLAN & GERAUGHTY,
MANUFACTURERS OF AND DEALERS IN
FOREIGN AND AMERICAN MARBLE,
Monuments, Mantels, Headstones, &c.,
Seneca Street, bet. Fourth and Fifth, rear of Market House, jcl5-6m LEAVENWORTH,.....KANSAS.

B. S. RICHARDS,
MANUFACTURER AND DEALER IN
SADDLES, BRIDLES AND HARNESS,
COLLARS, WHIPS, &c., &c., &c.
No. 50 Delaware Street, Leavenworth, Kan.

AUGUST, 1872.

Kansas Pacific Railway

The Short, Favorite and only All-Rail Route TO

- | | |
|----------------|------------------|
| Denver, | Colorado Springs |
| Georgetown, | Evans, |
| Golden City, | Green City, |
| Erie, | Cheyenne, |
| Longmont, | Salt Lake City, |
| Central City, | Elko, |
| New Memphis, | Reno, |
| Villa La Font, | Sacramento, |
| Idaho Springs, | Marysville, |
| Greeley, | San Francisco, |

AND ALL POINTS IN KANSAS, COLORADO, THE TERRITORIES, and on the Pacific Coast.

No Omnibus or Ferry transfer by this Route.
EXPRESS TRAINS run daily. MAIL and ACCOMMODATION Trains run daily, Sundays excepted.
Trains leave Leavenworth, Going West:
EXPRESS, 11:00, P. M.; MAIL, 9:00, A. M.; TOPEKA ACCOMMODATION, 4:35, P. M.
Trains Arrive at Leavenworth:
EXPRESS, 6:35, A. M.; MAIL, 4:35, P. M.; TOPEKA ACCOMMODATION, 11:20, A. M.
188 miles the shortest Line between Kansas City or Leavenworth and Denver.
Passengers taking this Popular Route will make close connections, as follows:
At Lawrence, for Baldwin City, Prairie City, Ottawa, Garnett, Humboldt, Thayer, Parker, Burlington, Oswego, Chetopa, and Fort Scott.
At Topeka, for Burlingame, Emporia, Burlington, Neosho Falls, Humboldt and Chetopa.
At Junction City, for Council Grove, Emporia, Burlington, Neosho Falls, Humboldt and Chetopa.
At Carson with the Southern Overland Mail and Express Co.'s daily line of coaches for Pueblo, Trinidad, Los Vegas, Fort Union, Santa Fe, and all points in New Mexico and Arizona.
At Denver with Passenger and Express coaches for Georgetown, &c., and with Colorado Central Railroad for Central City, Golden City, &c.
At Cheyenne, for Ogden, Salt Lake City, Elko, Reno, San Francisco, and all points in California and the Frontier.
Tickets for the above points are for sale at the Company's Offices at Leavenworth, Kansas City, State Line and Lawrence.
At Leavenworth with the Missouri Pacific and Missouri Valley Railroads for Atchison and St. Joseph.
Trains going East make close connections at State Line, Kansas City and Union Depots, with trains for Chicago and St. Louis, and all points South and East.
Pullman Sleeping Cars are attached to night express trains, and run through between Kansas City and Cheyenne, without change.
5,000,000 Acres of Choice Farming Lands for sale, situated along the line of the Kansas Pacific Railway, at from \$2 to \$6 per acre. For particulars, address J. P. DEVEREAUX, Land Commissioner, Lawrence, Kansas.
EDMUND S. BOWEN, General Sup't.
BEVERLEY R. KEIM, Gen'l Ticket Ag't.
General Offices—Kansas City, Mo.

PACIFIC RAILROAD (OF MISSOURI).

3 EXPRESS TRAINS DAILY!
OVER THIS
Old Reliable & Popular Route,
BETWEEN
St. LOUIS AND KANSAS CITY,
AND
The Principal Points in the Great West.
Pullman Palace Sleepers and Elegant Day Coaches,
Equipped with Miller's Safety Platform and the Patent Steam Brake,
RUN THROUGH EITHER WAY,
Between St. Louis, Kansas City, Fort Scott, Parsons, Lawrence, Leavenworth, Atchison, St. Joseph, Council Bluffs and Omaha,
WITHOUT CHANGE OF CARS.
TRY IT! TRY IT! TRY IT! TRY IT!
A. A. TALMAGE, Gen'l Sup't, St. Louis.
E. A. FORD, Gen'l Pass. Agent, St. Louis. jcl5-tdc15*

PURE BERKSHIRE PIGS.
Premium Lord of the West
PRICES REDUCED.
Send for Descriptive Catalogue. Sent free on request
J. K. HUDSON, KANSAS CITY, MO.

COLORED LITHOGRAPHS
OF
Fruits and Flowers.
NEW POCKET EDITION, SIX SAMPLES, 1.00.
Also, superb Show Card, price \$5.00 each. Price List free. my1-4m
P. O. Drawer 13, Bloomington, Illinois.
(Formerly with F. K. PHOENIX.)

Leavenworth City, Kansas. 1872.

KANSAS AGRICULTURAL AND MECHANICAL ASSOCIATION.

OFFICERS: F. G. LOWE, M. S. GRANT, J. W. NIEHAUS, D. N. BARNES, JAS. L. McDOWELL, PRESIDENT, VICE-PRESIDENT, SECRETARY, TREASURER, GEN'L SUP'T.

DIRECTORS: P. G. LOWE, W. MCN. CLOUGH, A. G. COGSWELL, M. S. GRANT, CHAS. H. CHAPIN, A. C. WILLIAMS, J. B. KITCHEN, W. S. PLUMMER, JAMES C. STONE.

LEAVENWORTH, KANSAS, June, 1872. The next ANNUAL FAIR of the Association will Commence on TUESDAY, SEPTEMBER 10th, 1872, And will continue FIVE DAYS. It will be held on the grounds of the Association, within the corporate limits of the CITY OF LEAVENWORTH.

MACHINERY OF EVERY DESCRIPTION,

Flowers, Fruit, Needle-Work, Wax-Work, &c., Will be placed in order previous to the Fair. In short, no effort will be spared to make the grounds of the Association, and the Fair this Fall, second to none held west of St. Louis.

The Premium List will Exceed \$15,000, all Cash. Of this list near Twenty-five Hundred Dollars will be expended in premiums upon the various classes of Horses, and a like proportion upon every other variety of Stock.

REMEMBER THE TIME—From the 10th to the 15th of September. Come one, come all, come with your families, come with your stock, come with any and every description of product raised upon your farm, come with the evidences of the thrift of your domestic household, bring needlework, paintings, wax flowers, &c., bring your butter, your cheese, your canned fruits, your jellies, &c.

Come One, Come All, and We will Make You Glad. The Premium Lists are now in press and will be sent to all applicants. For further information, address any officer of the Association.

J. NIEHAUS, Secretary, Leavenworth, Kansas.

Smith Mower & Reaper.

Simple in Construction, Very Light in Draught, True Plan of Rear Cutting, No Gumming of Guards, No Pressure on Tongue, No Side Draught, Safe for the Driver.

THE SIMPLE CONSTRUCTION OF THE SMITH MACHINE is one of its distinguishing features. There are parties who for five years have cut annually an average of one hundred acres, who report their Machines as running smoother and easier than when first purchased.

Our draft is very light—lighter, we claim, than any other Machine that runs—made so by the great care used in getting up our gearing, the small amount of it used, and also from the fact that there is no side draft, as has been satisfactorily proved in various trials.

The main frame of the Machine is made of wrought iron, angling, so as to secure the greatest amount of strength and elasticity with the least weight of material.

By the peculiar arrangement of the parts and distribution of weight, the pressure upon the necks of the horses is reduced to the minimum. Mowing can be done, indeed, without any neck-yoke or any connection at all of the horses with the tongue, showing the absence of both side draft and pressure.

Our SMITH MOWER AND REAPER is warranted to cut, with proper management, one acre per hour, or ten to twelve acres per day, of either grass or grain, in a workmanlike manner, with one pair of horses.

Repairs for Machines will be kept by our Agents, and all orders will receive prompt attention. For sale by M. S. GRANT, Leavenworth, Kan.

THE MISSOURI VALLEY LIFE INSURANCE COMPANY, OF LEAVENWORTH, KANSAS.

REASONS FOR INSURING IN THIS COMPANY:

- 1st. This is a WESTERN COMPANY, managed by Western men, whose known financial character, ability and position, afford ample guarantee for its careful and successful management. 2d. Its Policies are all Non-Forfeiting. 3d. Premiums all Cash. It receives no Notes, and gives none. Policy-holders have no interest to pay, and no outstanding notes as liens upon their Policies. 4th. Dividends and Losses paid in Cash. 5th. It has no restriction upon travel. 6th. Its Dividends are made upon the CONTRIBUTION plan, leaning the greatest pecuniary advantage to the Policy-holder. 7th. Its business is EXCLUSIVELY LIFE INSURANCE.

DIVIDENDS

Are the accumulation of interest upon Premiums paid; hence, the Company that loans its Assets at the highest rate of interest, can give you the largest dividends. Eastern Companies invest their moneys at six per cent., while this Company makes its investments at twelve per cent., or more.

Table showing investment figures: The amount, \$1,000, invested for fifty years at 6 per cent., compound interest, is \$18,420 15. Other entries show amounts for 8, 10, and 12 years.

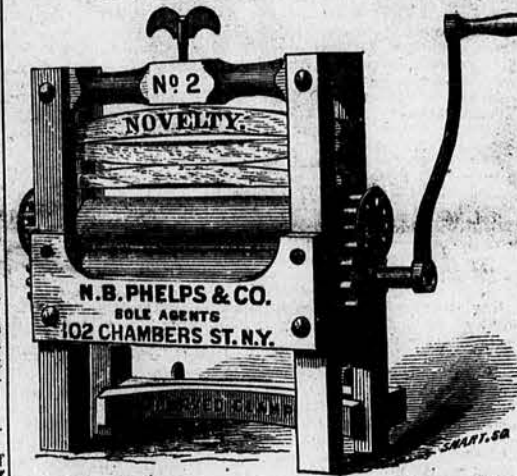
It is obvious that this Company offers greater financial advantages and inducements to the Policy-holder than any other Company in existence.

I am informed, from authentic sources, that Eastern Companies receive annually from the people of Kansas nearly one-half million of dollars for premiums. This takes from the State a very considerable portion of her 'cash capital.' We have the men and the means to organize and safely conduct Home Companies, and they should be encouraged.

J. CRAWFORD, Governor of Kansas. Annual Message, 1867.

OFFICERS: H. D. MACKAY, President; H. A. CALKINS, General Agent; W. E. HARVEY, Con. Actuary; feb15-1y-196. D. M. SWANN, Vice-President; Dr. J. L. WEAVER, Med. Director; H. L. NEWMAN, Treasurer; GEO. A. MOORE, Secretary; J. I. JONES, Ass't Secretary; T. A. HURD, Attorney.

THE NOVELTY AND EXCELSIOR CLOTHES WRINGERS!



SAVE TIME!

SAVE LABOR

SAVE Clothes



Cog-Wheels on both Ends of the Rolls!

STRONGEST, EASIEST WORKING AND MOST DURABLE WRINGERS!

Every Housewife Should Have One.

Sold Everywhere.

Bailey Washing and Wringing Machine Company, No. 102 Chambers Street, New York.

FREE LANDS & CHEAP HOMES

FOR

Soldiers, Sailors and Others, IN KANSAS.

THERE ARE 39,000,000 ACRES OF PUBLIC LANDS in Kansas, subject to Homestead and Pre-Emption Entry. Complete instructions as to how and where to obtain Government Land will be mailed to those desiring to immigrate, with a description of Lands subject to settlement, on receipt of one dollar.

Women are allowed to Homestead or Pre-Empt Public Land, the same as Men.

We are Ready to Locate Good Claims

And pay the Entry Fee for those desiring to immigrate, thus saving the settler from \$200 to \$500 in first coming to see how and where he can get a Claim.

WE GUARANTEE SATISFACTION—REFERENCES GIVEN.

We invite correspondence. Address

O. J. HOPKINS & CO.,

317 Delaware Street, Leavenworth, Kan.

European Larch and Evergreen SEEDLINGS!

- 15,000,000 Evergreen Seedlings; 12,000,000 European Larch Seedlings; 4,000,000 Small Transplanted Seedlings; 2,000,000 Small Transplanted Larches; 200,000 Seedling and Transplanted Mountain Ash.

The above are all grown from seeds upon our own grounds, and are better and cheaper than imported stock.

ROBERT DOUGLAS & SONS, Waukegan, Illinois.

GLEN FLORA Stock Breeding Association.

ORGANIZED UNDER THE LAWS OF THE STATE OF Illinois. Importers and Breeders of

SHORT-HORNED CATTLE,

Of the most approved and fashionable pedigrees. Thoroughbred and Trotting Horses, Cotswold sheep, Improved Berkshires, and Pure-bred Poultry in great varieties.

Stock of all kinds for sale at reasonable prices. Send for catalogues giving full description. C. C. PARKS, President, Waukegan, Ill.