· Minneapolis & St. Louis

Aibert Lea Route.

TWO THROUGH TRAINS DAILY

FROM ST. PAUL AND MINNEAPOLIS TO CHICAGO

Without Change, connecting with the Fast Trains of all lines for the

KAST AND SOUTHEAST!

The Direct and only Line running through care between MINNEAPOLIS and DES MOINES, 10 WA,

SOLIDTHROUGH TRAINS MINNEAPOLIS AND ST. LOUIS

and the Principal Cities of the Mississippi Valy connecting in the Union Depot for all point les South and Southwest! MANY HOURS SAVED

and the Only Line running Two Trains Daily Kansas City, Leavenworth and Atchison making connections with the Union Pacific and Atchison, Topeka & Sante Fe Railways.

with all trains of the St. Paul, Minneapolis & Man itoba; Northern Pacific; St. Paul & Duluth Rail ways, from and to all points North and Northwest REMEMBER! The Trains of the Minneapomposed of Comfortable Day Coaches, MAGNIFICENT PULLMAN SLEEPING CARS, and our justly Palace Dining Cars!

150 Lbs. of Baggrae Checked Free. FARL ALWAYS AS LOW AS THE LOWEST! For Time Pables, Through Tickets, etc., call upon the near citlicket Agentor write to

S. F. BOYD, 'A tt. Minneapolis.Min



e, mechanics, engineerin l patents ever published. th splendid engravings.

Rold by all newidealers. MUNN & CO., PubNo. 21 Broadway, N. Y.

ATENTS. had Thirty-Seven
had Thirty-Seven
yoars' practice before the Patent Office,
and have prepared more than One Hundred Thousand applications for patents in the United States and foreign
countries. Cavents, Trade-Mark, Copyrights, Assignments, and all other papers
for securing to inventors their rights in the
itied States, Canada, England, France,
many and other foreign countries, prepared
short notice and on reasonable terms,
nformation as to obtaining patents cheerfully
en without charge. Hand-books of informan sent free. Patents obtained through Munn
Oo, are noticed in the Scientific American free,
natage of such notice is well understood by all
who wish to dispose of their patents.
ss MUNN & CO., Office SCIENTIFIC AMERICAN,
dway, New York.

Notice of Final Proof—Land Office at Fargo, D. T., July 18th, 1887.

Notice is hereby given that the following named settler has filed notice of his intention to make final preof in support of his claim and secure final entry thereof, viz:

Osmund Knutson, D. S. No. 17133, for the nw & Sec. 18, Tp. 148 n, R. 57 w., and names the following as his witnesses, viz: O. P. Strand, Ole Halverson, Ole O. Groff, Ole Knutson, all of Aneta Postoffice, Nelson county, D. T.

The testimony of claimant and witnesses to be taken before it. W. Berry, judge and ex-officio cierk of the probate court at Sherboke, Steele county, D. T., on Wednesday, the 7th day of September A. D. 1887, at his office.

MICHAEL F BATTELLE,

28-38

Register.

Notice of Final Proof—Land Office at Fargo D. T., July 7th, 1887.

Notice is hereby given that the following name settler has filed notice of his intention to make final proof in support of his claim and secure final entry thereof, viz:

Donald Bryant,
D.S No. 16561, for the sw % of Sec. 34, Tp. 147 n.R. 6i w., and names the following as his witnesses viz: Crist Messner, William Leder, Charles Stermer, William Richardson, all of Cooperstown Griggs county, D. T.

The testimony of claimant and witnesses to be taken before Peter E. Nelson, judge and exofficio clerk of the probate court at Cooperstown, Griggs county, D. T., on Thursday, the 25th day of August, A. D. 1887, at his office.

MICHAEL F. BATTELLE, Register.

Bartlett & Glass, Attys.

NOTICE OF FINAL PROOF-Land office at Fargo.

Notice of Final Proof—Land office at Fargo, D. T.. July 18th, 1887.

Notice is hereby given that the following named settler has filed notice of his intention to make final proof in support of his claim, and secure final entry thereof, viz:

Charles Kroll, H. E. No. 14322, for the sex Sec. 18, Tp. 147, n., r. 57 w., and names the following as his witnesses, viz: Andrew Long, Alex Curry, Thomas Phelps, Andrew Johnson, all of Pickert P. O., Steele county, D. T.

The testimony of claimant and witnesses to be taken before R. W. Berry, judge of the probate court at Sherbrooke, Stele county, D. T. on Monday, the 5th day of September, A. D. 1887, at his office.

MICHAEL F. BATTELLE, Register.

E. J. McManon, atty.

NOTICE OF FINAL PROOF.—Land Office at Fargo, D. T., July 28. 1887.—Notice is hereny given that the following named settler has filed notice of his intention to make final proof in support of his claim and secure final entry thereof, viz:

Ole K. Hagen.

H. E. No. 10526, for the nw 4 of Sec. 18, Tp. 145 n, R. 57 w, and names the following as his withesses, viz: Charles C. Piatt, Thore A. Hagen, of Cooperstown P. O. D. T., and James Park, Gilbert G. Auren. of Gallatin P. O., Griggs county, D. T.

bert G. Auren. of Gallatin P. O., Griggs county, D. T.

The testimony of claimant and witnesses to be taken before the judge of the probate count for Steele county at Sherbrooke, St.ele county, D. T., on Thursday, the 15th day of September, A. D. 1887, at his office.

Michael F. Battelle, Register.

Battlett & Glass, attys.

29-34

NOTICE OF FINAL PROOF.—Land Office at Fargo, D. T., Aug. 10th, 1887.—Notice is hereby given that the following named settler has filed notice of his intention to make final proof in support of his claim and secure final entry thereof, viz:

Charles C. Pla: 1

H. E. No. 9330 for the nex of nec. 12. Tp. 145 n. R. 38 w. and names the following as his witnesses viz: Ole K. Hagen, Andrew Larson, Andrew Park, Dubous Newell, all of Cooperstown P. O., Griggs county, D. T.

The testimony of claimant and witnesses to be aken before Peter E. Nelson, judge of the probate court for Griggs county, D. T., at Cooperstown, Griggs county, D. T., on Friday, the 30th day of September, A. D. at his office.

Bartlette & Glass, attys.

Fooding Cows for Milk

Professor L. B. Arnold, who is con-sidered high authority in all matters pertaining to the dairy, advises, when milk is the object, the following as a profitable food for milch cows:

 400 pounds of bran
 \$4 00

 800 pounds of corn meal
 3 00

 100 pounds of cotton seed meal
 1 45

which gives \$1.21 as the cost of 100 pounds of the mixture, or if any or all the materials can be purchased at lower figures, the cost of the compound will

be proportionately less.
On the subject of how to feed ground rations, Professor Arnold says that there is no advantage in simply wetting ground feed to give to cattle. "It is quite as well for them to eat it dry, and it is better to feed it no in winter rules; it can be feed feed it so in winter, unless it can be fed warm. When the weather is suitable there is some advantage in wetting the hay or straw to be fed, and mixing the ground feed with it. Fed in this way the meal and coarse folder go into the first stomach, or rumen, together, and all are remasticated. If the meal is fed alone, it is liable to miss the first stomach and go directly into the third or fourth stomach, when it is not chewed over again, and hence it is not digested as soon or as well. One pound of the mixed food for each 100 pounds of live weight, mixed with straw, would be a suitable ration for milch cows. If fed to store cattle or dry cows, 25 per cent. less meal would suffice."

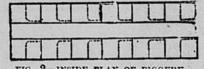
A Convenient Piggery.

Farmers ought to provide for swine protection from the heat of summer and the cold of winter a place where the young pigs can be fed by themselves, and where fattening as well as breeding stock may receive proper treatment. A good pasture in summer and a sunny yard in winter are the best places for pigs the greater part of the year; but during cer-tain seasons some kind of a house is quite necessary for swine where most profitable results are required,



FIG. 1 .- OUTSIDE VIEW OF PIGGERY.

This house may be cheap or expensive, to suit the taste and means of the owner. A very good piggery is shown in the accompanying illustrations, sketches of which were furnished by an Iowa correspondent, to The American Agriculturist. The building, a prospective view of which is given in fig. 1, is twenty feet wide and may be made as long as necessities. sary to accommodate the number of swine to be kept. Yet it is not advisable to keep too large a number in one house; who more than seventy or reventy-five are to be raised it is advisable to build addition



A width of 20 feet admits of a central alleyway 4 feet wide, and pens 8 feet wide on each side of it, as seen in Fig. 2. Each sow should have two pens 6 by 8 feet, one to sleep in and the other for use during daytime. The long outside walls are 4 feet high, with a door for each pen leading into an outside inclosure, 12 by 16 feet. The center posts.are 8 feet high. Over each pen and under the center roof are small windows to admit light and air. One or two of the pens may be used for storing corn and bran. From a never failing well, situated on higher ground a short distance away, water is conveyed into the house in pipes.

At a Paris menageric. Spectators chatting with the wife of the lion tamer:
"Is it true, madam, that a lion costs 5,000 francs?"

"That depends; there are lions and Hons."

"But your lions; for instance, Brutus?"
"Brutus I would not sell for 10,000 francs. He devoured my first husband." -Foreign Exchange.

Inks and Inkstands.

The evolution of script after printing was invented, or for a little time before, can only be understood by a comparative study of manuscripts as collated at great European libraries. The inks formerly used were rather paints than writing fluids, since it was not desirable that they should flow too freely from the stylus. The use of such as are popular now would in ancient times have been impossible. An inkstand in any of the ingenious mod-ern forms was for this reason unnecessary. The Arabs have used from time immemo-The Arabs have used from time immemorial the combined brass or silver pen and ink case, the long part for his sharpened reeds, and a sort of box with tight cover at one end for his semi-fluid ink. These admit of a high degree of ornament. The inkhorn of the clerk of the middle ages is often alluded to by old English writers. It was the first parent of the clegant thing in cut glass which may be overturned with impunity.—San Francisco Chronicle.

The British Medical Journal reports a case of poisoning from the accidental swallowing of a piece of an aniline pencil.

Josiah Hoopes says that Crawford's Loto, Druid Hill, Mountain Rose, Old Mixon, Pinuck, Reeves' Favorite and Stump are the cream of a long list of peaches certain to produce crops wherever peaches can be grown at all.

An experienced stockman tells that a ton of bran fed with two tons of hay is worth as much as four tons of hay fed alone to either horses, cattle or sheep. The feed cutter is necessary to make bran so profitable a feed.

Vick says: "The practice of spraying spple orchards just after the fruit has set with Paris green or London purple is coming more and more into favor, as it proves to be effective for the destruction of the codlin moth, and with no injurious effects to fruit or trees."

Summons.
TERRITORY OF DAKOTA, { ss.
County of Griggs.
District Conr., Sixth Judicial District.
National German American Bank of St. Panl,
Minnesota. Plaintiff, vs Thomas Knudson,
Knud Torkleson and Charles Anderson, defendant

Minnesota. Plaintiff, vs Thomas Knudson, Knud Torkleson and Charles Anderson, defendants.

The Territory of Dakota to the abave named defendants: You are hereby summoned and required to answer the complaint of the plaintiff in the above entitled action, which is filed in the office of the clerk of the district court of the Sixth judicial district. In and for the county of Griggs and Tearitory of Dakota, and to serve a copy of your answer to the said complaint on the subscriber at also office in Cooperstown in said county and territory, within thirty days after the service of this summons upon you, exclusive of the day of such service; and if you fail to answer the said complaint within the time aforesaid, the plaintiff in this action will take judg nent against you for the sum of one thousand doisars and interest at the rate of 12 per cent. per annum from the 26th day of November, 1884, together with the costs and disbursements of this action.

Dato June 11, 1887.

David Bartiert,

Plaintiff's Attorney, Cooperstown, Dak.

To the above named defendants: Take notice that the complaint herein was filed in the office of the clerk of the above named court at Cooperstown, Griggs county, D. T., on the 11th day of June, A. D. 1887. You are further notified that the following described lands have been attached to satisfy said demand; The sex of Sec. 22, Township 144 north, Range 59 west, and that the plaintiff will apply to the court for judgment against said inabs.

David Bartiert, Plaintiff's Attorney.

Dated July 8th, 1887.
DAVID BAUTLETT, Pin'ntiff's Attorney.

DETROIT.

Summons.

TERRITORY OF DAKOTA, County of Griggs.

District Court, Sixth Judicial District.

Richards Gorden, Paul D. Fergnson, Charles W. Gorden and Charles L. Kluckbohn, Partners as Gorden & Fergnson, plaintiffs, vs. Thomas Knud son, Defendant.

Gorden & Ferguson, plaintiffs, vs. Thomas Knudson, Defendant.

The Territory of Dakots to the above named defendant: You are heraby summoned and required to answer the complaint of the plaintiff in the above entitled action. which complaint is filed in the office oe the clerk of the district court for said Griggs county at Cooperstown, D. T. and to serve a copy of your answer on the subscriber at his office in Cooperstown, Griggs county, Dakota within thirty days after the service of this summons upon you exclusive of the day of service and if you fail to answer the said complaint within the time atoresaid, the plaintiffs in this action will take judgment against you for the sum of four hundred and sixty-seven dollars and fifty four cents, with interest at the rate of 12 per cent. per annum from the 20th day of December. 1884 together with the costs and disbursements of this action.

David Bartlett,

Plaintiff's Attorney, Coopetstown, Dak.

Dated June 4th. 1887.

To the above named defendant: Take notice, that the complaint herein was filed in the office of the clerk of the above named court at Cooperstown, Griggs county, D. T., on the 4th day of June. 1887. You are further notified that the following descalbed lands have been attached to satisfy said demand and the plaintiffs will apply to the court for judgment against the same: The east half of section thirty-two (32) in township one hundred and forty four (144) north of range fifte-nine (59) weat.

David Bartlett,

82-28 Plaintiff's Attorney, Cooperstown, Dak.

MINNESOTA.

Hotel Minnesota

Now open. Excursion rates.

PEADQUARTERS

C lose attention given to Final Proofs, Contest cases, Filings, and all business before the U.S. Land Office.

Buy and sell rear estate on commission. I am the only licensed auctioneer in

the county Call and see me.

ENGINE REPAIRS!

RUBBER & LEATHER

BELTING.

Rubber Hose, Lace, Leather, Packing, Pumps,

DAZEY, D. T.

W. L. PATTISON, PROPRIETOR.

any hoter on the

SANBORN & COOPERSTOWN RAILROAD.

A good Barn and Livery in connection with the House.

Headquarters in Griggs county for

LUCKEN

A. N. ADAMS.

Valves, Oil Cups, Iron Fittings,

Secretary Farmers' Mutual.

-CALL AND SEE ME.

FORD

Andrew Johnson, Land Attorney.

JOHN K. WEST, Proprietor

GENERAL REPAIR SHOP

(Farmer's Mutual Building)

Wagons, Carriages, Sewing Machines, Furniture, Farm Machinery, Engines, Locks, etc., repaired with dispatch-Saw filing a specialty.

M. M. ROBINSON.

COOPECSTOWN,

M. E WALKS,

House, Sign, Carriage and Ornamental Painter.

Eight years experience East.

HANGING PAPER

and Calcimining a srecialty.

Shop and of ce over Hoggarth's car-

ORTHERN PACIFIC RAILROAD.

THE DIRECT LINE BETWEEN SAINT PAUL,
MINNEAPOLIS.
Or DULUTH,
And all points in
Minnesota, Dakota, Montana,
Idaho, Washington Ter'y.

OREGON. BRITISH COLUMBIA, PUGET SOUND

ALASKA.

Express Trams Daily, to which are attached
PULLMAN PALACE SLEEPERS ELEGANT DINING CARS.

NO CHANGE OF CARS

ST. PAUL AND PORTLAND, OREon any class of Ticket.

EMIGRANT SLEEPERS FREE.
The Only All Rail Line to the YELLOWSTONE PARK **Pand** and Insurance Business

For full information as to time, rates etc., `Address CHAS. S. FEE, General Passenger Ager.

AT THE

FARMER'S HOME RESTAURANT

WILL BE FOUND

a full line of Fruits, Confectionery, Im ported and Domestic Cigars, Soda water, Ginger, Pop, and Sweet Cider.

Meals at all hours.

E. C. WARD, Proprietor, COOPERSTOWN, DAK.

FIRE

LIGHTNING. TORNADO,

> HAIL INSURANCE

> > C

This house now offers accommodations' superior to

At Lawrence Bros. Bank.

JAMES MUIR & CO.,

Contracors

and Builders.

Plans and estimates for building carefully prepared. All carpenter work promptly attended to.

COOPERSTOWN. Dak.