

How Is Your Blood ?

Hood's Sarsaparilla is sold everywhere.

In the usual liquid, or in tablet form called

Sarsatabs, 100 Doses One Dollar, Pre-

pared only by C. I. Hood Co., Lowell, Mass.

the Hartford, at a premium of 300 per

mo to bankers in the east," said Presi dent Grant, "that I might obtain hel

for our corporations out here in Utah

and in the death of Mr. Chase I feel as though not only a warm personal friend, but a friend of the entire peo-

ple of Utah has been called away from

STATE POULTRY FAIR.

Expected That 1,000 Birds Will be on

Exhibition Beginning Jan- 15.

The Utah State Poultry association

has found quarters for its annual ex-

hibition at 322 South Main street, below

the Walker Bros.' store. A beginning will be made Saturday, in putting the

birds in place, and the scoring begins

Monday, extending through Tuesday, so the opening can be made on Wednes-day, Jan. 15. The indications are that

chiefe will be at least 1,000 birds on exhibition, exclusive of 100 pairs of pigeons. A special feature will be the Rhode Island Reds of which variety there are promised over 200 birds, which made quite a showing at the

last state fair. The officials of the as-

sociation are confident that this dis-play will be the best ever made in this

MAY HAVE LENSE FACTORY.

Plans for Establishment of Large

Works in City Being Exploited.

A prominent local optician says rela-

tive to the recent New York dispatch

stating it was proposed to establish in

this country a "Blank" manufactory-that is, for the manufacturing of lense

development of the business in the United States. The process for making the crude article is guite elab-

there

city

will be at least 1,000 birds on

rich blood and keeps it good.

Judge Diehl Will Render His Decision at 10 O'clock Saturday Morning.

AFTER FIVE DAYS HEARING.

Morning Session Today Occupied by Attorney H. A. Smith in the Closing Speech for Prosecution.

"I will render a decision in this case Saturday morning at 10 o'clock.

Such was the announcement of Judge C. B. Diehl at 11:10 o'clock this morning, in the matter of the preliminary hearing of Samuel G. Spencer, charged with a statutory offense against the person of Hannah Iva Wallace.

The morning session of the court was occupied by Atty. H. A. Smith, in a closing argument for the prosecution. Mr. Smith was special counsel in the Asst. County Atty. Aaron Myers made the opening address for the state shortly before noon yesterday. He was followed by Adam A. Duncan for the defense. The latter, who had not inished when the midday recess was taken, resumed speaking at 3 o'clock, after which Atty. E. A. Wedgwood occupied the remainder of the session summing up of the case for de-

The hearing has occupied the atten The hearing has occupied the atten-tion of the criminal division of the city court for a period of five days, be-ginning Friday, Sept. 3. Many wit-nesses have been examined, about an equal number on each side, and the case has been strenuously fought pro and con, attracting to the court the at-tendance of many persons.

COAL CASE GOES OVER.

When the case of the United States when the Clab Fuel company came up for hearing before Master in Chan-cery S. H. Lewis this morning an ad-journment was taken until Monday. Jan. 20, at which time the taking of testimony will be resumed.

HUSBAND WANTS DIVORCE

E. B. Parsons has commenced ac-tion for divorce from Ione Parsons, alleging desertion. They have been married more than 20 years and have two children, of which Parsons asks the custody.

SUES BROWN ESTATE.

Dr. E. W. Whitney has brought suit in the Third district court against Max Brown as administrator of the estate of former Senator Arthur Brown to re-cover judgment for \$325 for pernsoal services

REMODELLING K. O'B.

The second floor of the Kelth build ing is "all torn up" and the occupants of the offices have disappeared, in the remodeling of the premises for In the remodeling of the premises for occupancy by the dry goods firm. Some of the tenants are finding, it "hard lines" in securing other quarfers, and they are not taking much consolation in the completion this spring of the Railroad Exchange buildin, as it is re-ported that practically all of the build-ings is spoken for. However, there will be plenty of room when the Newhous-buildings are finished. The steel work is now up to the sixth and seventh stories of these latter structures.

TRIBUTE TO GEO. L. CHASE.

Heber J. Grant Intimately Acquainted



Proved by Simple Experiments, Before

Nature Classes at State

Normal.

Great facts for farmers and admir-

able materials for school lessons in

agriculture, were presented vesterday

before the nature study classes at the

state normal by Prof. Hogenson of the

Certain factors in soil fertility was

the theme. The demonstration and lec-

ture was a continuation of the previous

lecture, which considered the plant food

in the soil. This lesson deals with the

necessity of having sufficient humus,

HUMUS IN SOIL.

FINDING THE HUMUS.

amount of humus in a soll may be per-formed by taking a small quantity of soll as it is found in the field. First weigh the sample and dry it in a mod-

weigh the sample and thy if it is back erate oven or on the back of the stove. When it is dry, weigh it again. Now place this dry soll upon a coal shovel above hot coals. The humus in it will

begin to smoke. If the soil is kept very hot for two or three hours, practically all of the humus will be burned, leaving only the mineral part of the soil. What

SOILS NEED OXYGEN.

We have already spoken of the neces

We have already spoken of the neces-sity of oxygen in the soll, when consid-ering both the molsture and the plant food factors. Practically all of our farm crops need a good supply of oxy-gen. A soil that is well drained and open, so that air enters it freely, has more bacterial life and consequently a bicker derive of fartility than a close-

PROVING THE THEORY.

At

experiment to determine the

oxygen, and heat in the soil.

Agricultural college.



FACTORS IN SOIL FERTILITY.

FOOD LAWS BRING BENEFITS.

Manufacturers Here Have No More Competition from Makers of Adulterated Foodstuffs.

cent. By this sale, he increased the capital from \$1,250,000, to \$2,000,000 and increased his net surplus by \$3,000,000. "There is no physical reason why Utah should not become one of the leading dairying states in the west. "Mr. Chase was a captain of finance, as well as of insurance. Quite frequent-ly there are great financial men at the head of insurance companies that are The winters are short and comparative ly mild, the summers only moderately poor insurance ten and vice versa, there are sometimes great insurance men that are poor financiers, but in Mr. Chase's case, he combined both. He was a financier of the highest quality. warm, the nights cool and pleasant, water is abundant and of excellent quality and good grazing can be had six months out of the year." With this statement the report of State Food and I do not believe any company, from the day that George L. Chase took hold Dairy Commissioner John Peterson is introduced. The report covering a year's work in the commissioners' office of the Hartford has made as remark-able a record. "In the panies of '90 and '91, Presivas submitted to Gov. John C. Cutler dent Chase assisted me by introducing

morning. this In speaking of dairying, the commis-In speaking of dairying, the commis-sioner declarcs that great advances have been made along all lines in the industry during the year. Centraliza-tion seems to be the center of interest, he says. There is a demand for large central stations where farmers may dis pose of their milk for distribution. Many such stations have appeared in the last year, the report declares, and much success has attended in each in-stance. The building of factories for the manufacture of dairy products, the report sets out, will soon become great factors in the industrial prosperity of the state. In the 176 creameries in-In the 176 creameries in state the spected during the year Mr. Peterson declares he has found marked improve-ment over methods and practises of past years.

QUALITY OF BUTTER BETTER.

Mr. Peterson speaks in high terms of Mr. Peterson speaks in high terms of the results that have been accomplish-ed in the enforcement of the new food law requiring the maker's name on the package and itsweight. He suggests that an amended law should prescribe the amount of moisture to be permitted and also requiring that it be designated on the package

and also requiring that it be designated on the package. There are 27 factories in the state where tomatoes, fruits, peas, beans and other farm and garden products are handled and prepared for market in canned form. The factories employ 750 people and the average daily payroll been \$1,500. The commissioner 800,000 cases of canned goods says 800,000 cases of canned goods have issued from Utah factories in the last year.

The commisisoner's report states that 175,000 cases of Utah made condensed milk have issued from the state's facmilk have issued from the state's fac-tories during the year. He points to this as an important and new industry within the state. A new condensary is to be opened soon in Sanpete county and is expected to add largely to the annual output of Utah factories. Butterine in large quantities has been

that is, for the manufacturing of lense glass in the crude; that such a factory has already been established, in west-ern Pennsylvania where a large amount of work is being done; also that there is some expectation of the establish-ment in Sait Lake of a similar plant, though on a smaller scale, by eastern parties. Until recent years, German manufacturers have had a monopoly of this business, and the attempt to force prices upward by im-porters will hasten the further dovelopment of the business in Butterine in large quantities has been shipped into the state during the year to offset the scarcity of butter. He declares that this article of food has been of uniformly good quality.

SLAUGHTERHOUSES BAD.

During the year Mr. Peterson has inspected 16 slaughterhouses and in inspected 16 slaughterhouses and in nearly every case he found the condi-tions presented to be most unsanitary. He has issued the necessary orders to remedy the conditions and declares that at the expiration of the three that remedy the conditions and declares that at the expiration of the time limit given in each case, if the conditions do not satisfy him, he will bring action in the courts to enforce the pure food

making the crude article is guite end-orate and delicate, calling for special skill in manipulation, the product being what chemists would term, "chemically pure," that is, absolutely free from flaws or any imperfection. The During the year the inspector inparing the year the inspector in-spected 640 meat markets and as the result of his visits 980 pounds of meat and 500 pounds of sausage were con-demned. Fresh meat, pork loins and

Put a box of McDonald's Dutch chocolates in your pocket when you start home this even ing. It will give a whole evenings' pleasure to the family.

McDonald, Salt Lake, exclusive manufacturer of fine chocolates,

by the can in the cool place. It will then be found that the plants will practically stop growing, or at least will grow very slowly, while the plants in the two cans still remaining in the warm place will continue to grow rapidly and develop well.

VARIETY OF CROPS AND FOOD.

VARIETY OF CROPS AND FOOD. Let us now consider the benefits de-rived from crop rotation; that is, by following one crop with a different crop, instead of growing the same crop year after year upon the same land. In animal feeding, a frequent change of food and a variety of foods have been found very beneficial. No matter how complete and well balanced a par-ticular food may be, or how well it may be relished at first, it soon becomes tire-some unless a rotation of other foods of sufficient variety and frequency is provided. Undoubtedly the prolonged use of a single article of diet without change will introduce substances, or will set up changes or conditions in the body which seriously interfere with its normal functions. A change of its normal functions. A change of diet provides time and opportunity for the elimination of these objectionable products, and for the overcoming of products, and for the overcoming of unfavorable conditions. It does not appear improbable that a crop grown long upon the same land might intro-duce into the soil both substances and conditions which become, by accumulation, injurious to the growth of the particular kind of crop which produced these substances or conditions, while to another crop they might be harmless or even beneficial.

PLANTS POISON THE SOIL.

The bureau of solls of the depart-ment of agriculture at Washington has recently done a great deal of work up-on this phase of soil fertility. The in-vestigators have come to the conclu-sion that each crop gives off a toxic or poisonous substance, which is in-jurious to the particular crop that pro-duced it. It thus makes the soil un-sanitary to that particular crop which therefore refuses to grow normally, or Humus is the product of decaying orgives to the soil its dark color. Where the soil is warm during the whole year, The soli is warm during the whole year, and in dry climates where the soli is open on account of the small amount of moisture received, and also in sandy soils, the rate of complete decay is so rapid that the amount of humus pro-duced is very small. Where the soil is damp and the rains frequent, the or-ganic matter decays more slowly, and the amount of humus is relatively greater. Humus is quite insoluble un-der field conditions, so that it does not leach away. Of itself it is of no use to plants; but it becomes the food of bac-teria, which by degrees convert it into soluble forms so that plants can use it. The humus of the soil is increased by adding manure and plowing under green crops and stubble. FINDING THE HUMUS. santary to that participat crop which therefore refuses to grow normally, or not at all. Crop rotation is not much practised in the west. The same crop is usually grown upon the same land year after year, as long as it will grow at all. This is a great mistake in our agriculture agriculture.

SYSTEM OF ROTATION.

The systems of rotation which have The systems of rotation which have been practised and pronounced satis-factory under different conditions and in all varieties of solls, usually consist of (1) some crop which only partly covers the ground and which permits cultivation through a full half or more of the growing season; as corn, pota-toes, beets; (2) some leguminous crop, like lucern or clover, which favors the fixing of free nitrogen from the alr: like fucern or clover, which labors the fixing of free nitrogen from the air; and (3) some crop like grain or grass, which completely covers the field. The grains and grasses fully use up both the nitrates and the other saits. The leguninous crop also uses up foods but permits the production of more organic nitrogen. Cultivated or hold crops like corn, potatoes and roots. all of the humus will be burned, leaving only the mineral part of the soil. What remains should now be weighed, and the amount per acre and the per cent of humus in the soil determined. In these calculations, take 4,000,000 pounds as the weight of soil per acre, and de-termine the weight of organic matter in an acre of the soil tested. hold crops like corn, potatoes and roots, while they consume the nitrates already in the oil, permit excellent facilities for the production in the soil of more than they use by changing them to available forms. It is, therefore, a ra-tional practise to follow a cultivated crop with grain, in order to make use of the accumulated plant foods. Grain should then be followed with ucern or clover in order to accumulate a fresh supply of nitrogen from the atmos-phere. Finally the leguminous crops should then be followed with lucern or corn, which provide favorable condi-tions for the development of nitrifying organisms by reason of the frequent cultivation which these crops require. A ROTATION EXPERIMENT. in a street car, got to talking with an acquaintance who referred to the presacquaintance who reterred to the pres-ence in Sait Lake of so much scarlet fever and diphtheria, and the unpleas-ant experiences he had been subjected to while in quarantine while the fever was present in his household. To his surprise and some consternation, the Main street business man remarked in the most casual way that several of his children were just broken all out with a bright scarlet rash. "Of course you children were just broken an out with a bright scarlet rash. "Of course you at once called in a physician," immedi-ately asked the acquaintance. "Oh, no," was the reply: "we're Christian Scien-tists." "Then you have taken no pre-caution whatever to protect the com-munity from possible infection through scarlet fever!" The other party did not A ROTATION EXPERIMENT.

more bacterial life and consequently a higher degree of fertility than a close-grained, air-tight soil. Air may peno-trate the soil to a depth of many feet, depending upon the openness or air spaces between the soil particles. The rapidity and degree of seed germination in the soil and growth of the plant later depend largely upon the supply of oxy-A very instructive experiment illus-trating the benefit of rotating crops may be carried on on any piece of may be carried on on any piece of should be followed with potatoes or containing a square rod. Have them both plowed or dug up and otherwise depend largely upon the supply of oxy-gen held by the soil. Soils are made light and open chieffy by cultivation.

both plowed or dug up and otherwise handled in the same manner. Sow one ground. Use two plats of ground each to wheat every year for a number of years, and rotate crops on the other as follows: First two years lucern, third year potatoes or corn, fourth year wheat, fifth year An experiment to show that heavy sow again to lucern. At the end of five years, figure up the products. You

man on the baseball team of this across the continent. They are trave ing in Col. Clowry's private car. academy. In this same year I pulled number 3 School Directory—A school director has been issued by the board of edu cation of the city schools. The name and addresses of officers and member are given, as well as of principal teachers and janitors in all the school The pamphlet contains 54 pages and i neatly bound in leather.

In this same year I pulled number 3 on the Portland Rowing club junior four, and represented the club on the track team, running the half mile. In June, 1887, I graduated from Port-land academy, and went to Williams college in the fall. My first will I didn't make the 'Varsity, but played on the freshman team. The next two years at Williams I made the 'Var-sity, and the following year-1900 I sity, and the following year-1900 I went to Stanford, where I made the Varsity

Dr. Cook's Tople—Dr. V. T. Cook of Cheyenne, a well known local med-ical man and scieztist, who is to spear at the coming dry farming congress whres Manager Harris of the Commen-cial club that he will read a paper of "Drouth Resistantng Crops and then Treatment," After that I went to the East Indies, China and Japan for three years, work

After that I went to three years, work-ing for a mining company. In the summer of 1902 I played first base on the Shanghai baseball team, an Amer-lean ball team in China. In the fall of 1904 I played right guard on the Multnomah Amateur Athletic club of Portland. Then I came down to Nevada to work as a civil engineer, and remained there and in western Utah, until this fall, when I came to Salt Lake. Then I played here on the football team, after en-tering the university to remain pend-ing the opportunity to go to Peru. "As to the one-year rule, which it is claimed would dehar me here," I am eligible to play on Yale football team itself, or Harvard, or any team. The year-rule applies to students transferring from other colleges, and I have not been in college within a year Dicd From Effects of Fall—Abr Hoimberg of Granger, while work on a building at Lark, yesterday mo-ing fell to the ground, a distance of feet, and died from internal injur shortly afterward. He was 30 ye old and unmarried. Funeral servi will be held at his home in Grang the date to be announced later. Complied Laws Appear—The ad-vance sheets of the compiled laws of Utah have come from the press, The first volume contains about 500 pages while the completed volume will con-tain about 1,600 pages. It will be bound in law sheep. The advance sheets show remarkably fine type graphical work, both as to compo-sition and impression. The revision and compilation is being done by J. T. Hammond, former secretary d

transferring from other coneges, and I have not been in college within a year before coming to Salt Lake, while I have credits that would admit me to junior standing anywhere in the coun-

WAS RAILROADED."

Former Dean Eddle Claims He Was Victim of Conspiracy.

Late this afternoon the findings of the ecclesiastical court in the case of x-Dean J. B. Eddle will be made public. The accused has prepared an laborate statement, which will be read

before sentence is passed. Mr. Eddle claims in the document alluded to that he did not have a fair and impartial hearing and that he was railroaded through to conviction. He nakes the further allegations that the charges were brought against him by persons who were prompted solely by jealousy and that there existed a con-spiracy among certain individuals to bring about his undoing, either by fair neans or foul. Sentence will be passed by Bishop

Spalding at 4 p. m. in a room of St. Mark's cathedral. As the doors will be open to the public, it is expected that many persons will avail them-selves of the privilege of being present.

DR. BEATTY ON WAR PATH.

Hot on Trail of Alleged Violator of Quarantine Regulations.

A well known Main street business man, in riding down town this morning,

CAPT. DAN ELLIS DEAD.

Was a Famous Union Scout During the Civil War.

Nashville, Jan. 8.—Capt. Daniel El-lis, the celebrated union scout of East Tennessee, is dead at his home hear Elizabeth, aged 79. During the Ciril war the confederacy set a brice on his head

HOUSE CURRENCY BILL.

Washington, Jan. 8.—The sub-comm of the house committee on banking currency, to which was entrusted framing of a bill to increase the ela ity of the currency, reached a conclu-today and will report favorably to full committee a bill drawn in the r by Chairman Fowler of the committee

ROBBERS WRECK KANSAS BANK

scarlet fever!" The other party did not seem to think it at all necessary, and passed the matter off, as though it was of no consequence at all. The citizen who had been through quarantine, straightway proceeded to express him-self on the subject in terms of a ver-million hue, and wanted to know how it could be that he himself should be compelled to go through the rigors of Ottawa, Kas., Jan, S.-Robbers early today wrecked the safe in the State Bank of Quenemo, at Quenemo, Kas., near here, and escaped with its entire con-tents, estimated at between seven and eight thousand dollars. The robbery is believed to have been committed by four men, who escaped. compelled to go through the rigors of quarantine, when this party was going scotfree, with scarlet fever probably raging in his family. The situation was at once reported to Secy. Beatty of the state board of health, who proceeded to go immediately on the war path. He declared his positive intention to handle this case without the intervening mecompelled to go through th WEATHER REPORT

Gov. Cutler as ex-officio chairman a the juvenile court commission. The re-port is very brief and simply state that in his work as probation officer he has found it necessary only to be kind to wayward juveniles, caution, ing them and advising them as to proper conduct. It has not been ne cessary to bring any child before the court for delinquency. ourt for delinquency.

court for delinduency. Bransford's First Message—Mayor Bransford's first message to the div council is almost ready for the re-corder and will be presented to the council at its first regular meeting next Monday night. Owing to the lateness of the arrival of reports from the heads of several div departments there is much that the mayor is unable at this time to incorporate within his report. Later, probably within two or three months, he will submit a sup-plemental report carrying much infor-mation as to statistical and financial summaries.

Dr. Cook's Topic-Dr. V. T. Cook

Died From Effects of Fall-A

T. Hammond, former secr state, and Grant H. Smith

Juveniles in San Juan---Wilme Bronson, probation officer for the Sev enth judicial district at Montleeilo, San Juan county, has filed his report will Gov. Cutler as ex-officio chairman o

secretary

PERSONAL.

John P. Meakin left for Chicage on the Overland limited this after, noon

On Sunday, Jan. 12, 1908, the con

vention of Religion classes of Tooela, Davis, Salt Lake, and Ensign stakes will take place in Barratt hall. Meet-ings at 10 a. m. and 2 p. m. All are invited.

head.

With Deceased Insurance President.

The dispatches last night chronicled the decease at Hartford, Conn., of Geo. Chase, president of the Hartford Fire Insurance company. Mr. Chase was well known in this city, by the leading fire insurance companies here, and his death is felt by many as a personal as well as a loss to the busi-

ness and financial world. President Heber J. Grant of the Hom Fire of Utah was intimately acquainted with President Chase. In speaking of the latter's demise this morning, Presi-dent Grant said, that there was no greater friend to Utah in the eastern financial world than had been George L. Chase. Of the people of this state, Mr. Chase had said to Mr. Grant, that the dealings of the people gave him such confidence in their business integ-rity, that he considered the moral haz-ard of fire risks here to be less than any other place in the country. Of Mr. Chase as a man, President Grant said: Fire of Utah was intimately acquainted

Grant said: "He was of the highest honor and integrity in all of the walks of life, and was respected by all who knew him. He was a true and loyal friend, and when you were in his home you felt that you were in the home of an honest, kind, Christian gentleman.

"He was a giant in the insurance pro-fession, and as an evidence of the es-teem and confidence reposed in Mr. Chase by the investing public, I will state, that after the San Francisco catastrophe, with losses of over \$10,-000.000 staring his company in the face that they had such confidence in him that they bought \$750,000 of stock in

WE INSIST

If you are ever going to wear Hats, Clothes or Haberdashery again that you should come into this store with the idea of buying, not sometime, but NOW.

Reductions on everything, even Hart Schaffner & Marx Clothes.

Richard For Vadance C.

"blanks" are sawn into small circular slabs about 1½ inches in diameter, from which the manufacturing opticoan grinds lenses according to pre-scriptions from the oculist. Sometimes the slabs come ground on one side, Owing to the increasing number of cases of defective vision in this country, not only among adults, but among children, the demands of the trads are continually increasing, and the busi-ness branching out. Poor light and desks improperly placed with reference to light, in American school rooms, are said to be responsible for the growth of defective eyesight among the young. continually increasing, and the busi-

young. prominent local optical firm is A prominent local optical firm is maintaining on its premises a night school for the study of optical science, with an instructor of 30 years exper-jence from Chicago. There are 30 students who appear much interested in the valuable instructions offered

LORCH COMPANY DISBANDS.

The Theodore Lorch company, which for a period of two or three years, has been playing in and around Utah, was disbanded in Denver last Saturday hight, at the close of a performance in that city. Mr. Lorch is now in Chi-cago, selecting a company for an ex-tended presentation of "The Lleutenant tended presentation of "The Lleutenant and the Cowboy," a play written ex-pressly for him, and which was pre-sented in Salt Lake during the early fall. Manager Peiton of the Western Theatrical circuit is at the present time in New York, arranging for a number of heavyweight melodramas, to be put on in stock by Mr. Lorch and the company that he is now cheesing the company that he is now choosing, during the coming summer.

demned. Fresh meat, pork loins and poultry amounting to 14,000 pounds was ondemned during the year and de-

stroyed Pure food provisions in the new laws have driven 12 grades of lemon extracta from the market and in the same man-ner eight grades of vanilla have also disappeared. The operation of the federal pure food laws has greatly bene-fitted Utah manufacturers in that the same requirements are made of eastern and western manufacturers as are obtaining in this state. Inferior goods, therefore, are no longer in competition with honest goods manufactured at

home. In conclusion the commissioner de-clares that regular bulletins will be issued from his office at intervals con-taining information for the public as to what foods offered for sale in the markets of this state are impure and adulterated. He will also issue a pam-phiet on the care of milk.

COASTING ACCIDENT.

Ralph McClane Breaks His Leg While Riding on a "Schooner."

While coasting down the hill near P street, about 11 a. m. today, Ralph McClane, aged 14 years, received a broken leg, and is now in St. Mark's hospital. The boy, with Harry, Hilton, son of Officer William Hilton, was on a large "schooner," which collided with a delivery wagon. Hilton and the others jumped and saved themselves,but young McClane was not in a position to avoid the collision.

VOUGHT NOT GUILTY.

J. A. Vought, charged with stealing three bales of hay from his employer, was found not guilty this afternoon. Vought had his arraignment yesterday before the city police court.

When Your Physician Prescribes

he knows that his wishes will be followed to the letter if his prescription is filled at our store. We will send for, compound and deliver your prescription immediately.

F. J. HILL DRUG CO. "The Never Substitutors."

clay soils are materially improved by making them lighter so that air can onter more freely, can be made by tak-ing a pair of two-gallon cans, and filling both with a heavy clay soil. Mix the soil in one can with finely cut straw or coarse sand, which will have a ten-dency to loosen or lighten it. Pack down with the hand. Let both stand for a week. Then plant 10 kernels of oats in each can, and note the difference in the growth of the resulting plants, both as to the time of coming up and the ra-pldity of growth afterwards. The plants in the can containing the soil lightened with straw or sand will come up first, will grow more rapidly, and in every way will be better plants than those in the other can. The oxygen in the looser soil has aided the growth of the plants.

SOILS SHOULD BE WARM.

A certain degree of heat is neces-sary in the soil before any of the chemical biological, or physical changes which are necessary to the develop-ment of plant foods in the soil can go on. When the temperature falls to 32 degrees F, nearly all the life processes cease. Experiments have shown that, with most cultivated crops, growth does with most califyrated crops, growth does not begin until a temperature of 45 de-grees F, has been reached, and that it does not take place most vigorously until after a temperature of 68 degrees F has been reached. There is a certain degree of temperature at which seeds recombined most randaly and produce degree of temperature at which seeds germinate most rapidly and produce the most vigorous plants. Prof. King has worked out a table showing the best soil temperature for a number of

crops. It is as follows: Wheat, 83 degrees fahrenheit; bariey, 84 degrees; peas, 82; corn, 93; beans, 79; squash, 93; clover, 70; turnips 89; mel-ons 99.

HEAT IN WET AND DRY SOILS.

A dry soil will become warm in the sunshine much more rapidly than a moist soil will because from the moist soil water is continually being evapor-ated by the sun, and this process keeps down its temperature. Moreover, soil becomes warm by the application of less heat than does water. Take 100 pounds of water at a temperature of 32 degrees. To raise its temperature one degree a certain amount of heat will degrees. To raise its temperature one degree, a certain amount of heat will be required. If, now, we take this same amount of beat and apply it to 100 pounds of loamy soil, its temperature will be 38.65 degrees. If we repeat the experiment with sand, its temperature will be 41.62. This shows that soil is more easily heated than water is; hence, a wet soil is a cold soil.

EFFECT OF GOOD TILLAGE.

When a field is left very uneven and lumpy, the heat of the surface soil is rapidly lost in warming the air above, and the result is that the deeper soil remains cooler. Good tillage prevents the escape of heat by keeping in the soil moisture. This large amount of heat which would ordinarily be used to evaporate water is then retained in the soil. Good tillage, then, saves heat as well as water.

A TEMPERATURE EXPERIMENT.

A TEMPERATURE EXPERIMENT, To show that temperature plays an important part in seed germination and plant growth, get four cans and fill them with the same kind of soil; then add sufficient water to bring the soil to the best condition for plant growth. Flant wheat in all of the cans; place three of them either in the warm sun-shine or near the slove; place the fourth in a rather cold place. Note the difference in the time it takes for the difference in the time is the three warm cans. The plants in the the there warm cans will be up a long time be-row take one of the three cans that has been in a warm place and put it

five years, figure up the products. You will find that the greatest value has been realized from the rotated plat, while the soil is also in a much better condition on that plat at the end of that length of time than on the other.

EXPERIMENTS IN GERMINATION.

Two very instructive experiments can be performed illustrating first, the germinating power of seeds, and sec-ond, the proper depth to plant seeds of various kinds.

of various kinds. To test the germinating power or vi-tality of seeds, take two common plates; upon one put a little gawdust and over this place a plece of flamel. Thoroughly moisten the sawdust and flamel. Now count out 100 seeds of the variety you wish to test just as they come, poor and good alike. Place them on the wet flamel and cover with another plece of wet flamel. Put the plate over this one, and set it in a modanother piece of wet flannel. Put the plate over this one, and set it in a mod-erately warm place. After 48 hours, count and remove all the sprouted seeds, Do this each day for five days. After this time, all the seeds that will sprout will have done so, and the per-centage of germination can be calculat-ed. It will be necessary to add water from time to time so as to keep the flannels and sawdust damp. Good seed should have a germinating power of should have a germinating power of from 90 to 98 per cent. To test the prop-er depth to plant seeds, fil a tall bot-tle with soil and place seeds at various depths such as 1, 2, 3, 4, 5 and 6 inches. Place them near the glass, so their progress may be seen through the sides, Wrap the bottle in black paper; sides. Wrap the bottle in black paper; which should be taken off only when examining the seeds. The paper keeps out the light, so that the seeds will germinate naturally and the resulting rlartiets develop normally. As the plants progress, the exeptiment will readily show what depth of planting preduces the best plants.

SEELEY'S RECORD.

Varsity Guard Tells of His Participation in Various Forms of Athletics.

Carrol C. Seeley, guard on the University of Utah football team during the past season, feels that his athletic standing as an amateur, and a man with a perfect right to play in the undergraduate game, has been wrongfully attacked in Salt Lake, and that the impression that there is reason for keeping him out of athletics, is an er-

roneous one. In a statement made to the "News" today, Mr. Seeley declares that he way not induced to come here from Ely, Nevada, to play football, but was at-tracted to the university this fall by Nevada, to play football, but was at-tracted to the university this fall by the opportunity to take a course in Spanish, which would fit him for work in Gerro de Pasca. He came heres from Ely to apply for a place in the Peruvian mines, but on being told to wait a while, he decided to study Span-ish, applied to the university for en-trance, and not until he had been here two weeks did he think of football. "My entire athletic record is an open one, and can easily be secured," de-clares Mr, Seeley. "My home is in Portland and there I early became in-terested in athletic events. My first appearance was with the Multhomah Athletic club when I was 17 or 18 years old. I took the middleweight anna-teur championship of Portland in 1896. I was fulback and capitaln of the Portland academy prep, school football team, in the same year, also first bases.

Record at the local office, U. S. weat er ureau, for 24 hours ending at 6 a. t today. ELECTS DIRECTORS TONIGHT. M. & M. Association Will Select Five

today. Temperature at 6 a. m. 20 degrees. Max-imum 36, Minimum 18, Mean, 27, which is 1 degree below normal. Accumulated precipitation since Janu-ary first 30 inch. Relative humidity at 6 a. m. 73 per cent. Two-Year Term Officers.

The M. & M. association will elect FORECASTS TILL 6. P. M. THURS DAY. five new directors this evening. The DAY. Local forecast for Salt Lake City and vicinity-Fair tonight and Thursday. Utah-Tonight partly cloudy and warm-er: Thursday partly cloudy snow in north portion. following 10 directors were elected for

two years and have yet one year to serve

dium of gloves.

serve: George S. McAllister, Z. C. M. I., fac-tories: Nephi L. Morris, Elias Morris & Sons Co.; John R. Bruff, Utah Soap Co.; John Q. Critchlow, Utah Imple-ment & Vehicle Co.; O. R. Meredith Meredith Trunk Co.; J. R. Valentine, Utah Bedding Co.; R. V. Hunt, Fleisch-man Compressed Yeast Co.; A. H. Cook, Cook Tea and Coffee Co.; John H. Denhalter, Desert Soda Water Co.; F. J. Alexander, Alexander-Dibblee Opcital Co. The two year term of the following five directors has now expired: O. H. Hewlett, Hewlett Bros.' Co.; Wil-

9 a. m. a. m. b. m. YESTERDAY'S RECORD. Maximum

m.

m. m.

George Austin, Utah Sugar Co.; Wil-liam G. Lambert, Lambert Paper Co. Theo. Nystrom, Taylor-Armstrong Lumber Co.; Will R. Sibley, F. Auer-bach & Bro.

BURGESS SAYS HE SHOT.

In another column is a report of th arrest of City Councilman J. D. Murdock for shooting his gun, while duck hunting, after sundown. Today duck hunters, who are much exercised over the arrest, held a general indignation meeting in the Western Arms store, and during the talk, Dorcey Burgess put forward a claim that he fired the three shots which were referred to in testimony on which Councilman Murdock was convicted.

"It was not after sundown," declared Burgess. "If a court will say it was I will gladly pay the fine. I am not a hunter to disregard the game laws.



Bank Clearings-Today's local bank clearings amounted to \$463,453.55 an against \$1,140,844.51 for the same day last year.

Embezzlement Case Set-The case of Utah vs. R. B. Hanson, charged with embezzlement, has been set at 16 o'clock tomorrow morning before Judge Diehl.

Fuueral This Afternoon—The re-mains of David Lewis, who was killed in a railroad wreck at Elko. Nev., on Jan. 2. were brought to his former home in Sandy for interment, and the funeral is being held there this after, noon.

Depot Officials Here—Prest. R. C. Clowry of the Western Union, Dist. Supt. Leonard of Denver, and a party of officials, are in town from Denver this afternoon, on a business trip

REFURNED MISSIONARIES. Have you a friend or acquaintance your former field of labor, to wh Have you a friend or acquaintance a your former field of labor, to whom you would like to send a copy of the Semi-Weekly News? If so, take ad-vantage of our special offer, made to ald the geat missionary work. We send the paper one year to any point in the United States, Canada or Mexico.at half price, \$1.00. This does not apply to points where there are regular wards or stakes. Foreign postage es-tra.

TODAY'S TEMPERATURE.

m.

R. J. HYATT Section Direct

NEW JATALOGUE OF CHURCH WORKS.

Just issued. Send to Deseret News Book Store, Salt Lake City, Utah, for a free copy. Special terms to dealers.

DIED. SPENCER-At his residence, 118, Third East, January 7, at 1 a. m., John Spence-er, aged 81. Funeral in the Thirteenth ward chapel, sunday at 1 p. m.

GREEN-At Murray, Salt Lake County, In her 48th year, of pneumonia, Maggle Cowau Green, daughter of the late Au-drew and Maggle Cowan, and wife of William Green. She leaves 9 children. Funeral announcement later.

R. E. Evans Florist, 46, S. Main Sta Floral designs a specialty. Phone 961

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