It is Proposed that it Shall Be Second to No Other State.

The Nebraska state commission, consisting of G. W. Wattles of Omaha. president; C. H. Morrill of Lincoln, vice president and treasurer, and Judge Matt Miller of David City, secretary, have secured the services of H. G. Shedd of Lincoln as asisstant secretary and established offices in the McCague building at Omaha. A large amount of preliminary work has already been accomprished, and it is the purpose of the commission to make Nebraska's exhibit at St. Louis in 1904 second to that of no other state in the Louisiana purchase territory.

Mr. James Walsh of Benson has been appointed superintendent of agriculture, and the following assistants have been employed: C. C. Wright of Thedford, William sames of Pleasant Hill and John H. Taylor of Waterloo, as collectors of grasses of the state; and the following as collectors of sheaf grain: T. E. Bennett, York; T. J. Buckmaster, Creighton; S. Clingman. David City: J. W. Darrah, Auburn; S. H. Dole and Sons, Beatrice; J. C. Dort, Pawnee City; L. F. Frye, Clay Center: Charles Grau, Bennington; J. W. Haws, Minden; E. C. House, Broken Bow; William James, Pleasant Hill; J. N. Lemon, Hartington; George A. Miles, Ainsworth; J. W. Robinson, Franklin; J. L. Rynearson, Madison; A. W. Steele, Aurora; C. D. Stoner, Osceola; N. D. Thorp, Wahoo.

Special premiums have been offer ed for the best selections of these products. The commission has added to the Nebraska Improved Corn Growers' association premium list the sum of \$750 additional premiums, and the exhibits of corn for the exposition will be taken from the corn exhibited at the association's annual corn show to be held in Linco'n next January. Five thousand square feet of space located in the center of the agricultural been secured, and Prof. Frederick W. will assist in making Nebraska's ag- ing the meeting. ricutural exhibit one of the very best

A superintendent of the horticultural exhibit will soon be selected. in this state will be exhibited.

The exposition management has appropriated \$250,000 in premiums for the live stock show to be held in connection with the exposition. The commission will assist the Nebraska live stock growers in making their exhibit second to that of no other state.

Prof. E. H. Barbour of the State university has been engaged as superintendent of the educational exhibit, and in connection with this exhibit it is proposed to illustrate in a pictorial manner the resources of Ne-

It has not been definitely decided be erected. The commission has asked for private donations to add to the appropriation of \$35,000 made by commission to sit upon the boundary \$25,000, making a total of \$60,000 at runs. The principal point of dispute that it may be ample for the work in those engaged to assist can be secured without compensation. The commissioners all serve without pay, and several of Nebraska's most prominent citizens have already volunteered their services along special lines to assist the commission.

Tornado at Newport.

NEWPORT-A tornado from the aortheast struck Newport and destroy ed all the principal haybarns in town. The total loss is about \$7,000.

Heat Fatal to Farmer Boy.

SCHUYLER - Adalf Kaplan, roung Bohemian aged 18, who came from his native land but a short time since and was employed on the farm of Prokop Castek, near Schuyler, died from sunstroke. He was in the field A young girl went out with lunch for him and found him lying dead behind the cultivator, where he had fallen. He was robust and hearty apppearing.

Death from Toy Pistol.

CHESTER-One death and another probable fatality is the Fourth July record here. John Harmes, vears old, son of John Harmes, came to town and asked Dr. Stretton to dress his Fourth of July finger, which on that day. The doctor found strong symptoms of blood poisoning. The sued in a short time.

Ten Counties Are Delinquent.

Ten county clerks in the state are delinquent in making their returns of the assessed valuations of their counties and as a result their counties are likely to have to pay more taxes than they have had to pay with the returns filed. The auditor sent out a circular letter to the delinquents explaining that under section 72, chapter lxxvii. article i, of the compiled statutes of by the different cities competing for 1901, returns must all be in by July the prize and also by the geographical

To Fix the Boundary. pointed by Governor Mickey. The choice of the executive fell upon C. J. Swanson of Cakland, Dr. F. O. Robinson of Hartington and E. A. Lundberg of Wayne. They will receive fully carrying the new law into opera-\$10 per day.

TERSELY TOLD STATE NEWS.

Geo. W. Wilhite, over ninety years old, died last week at Falls City. The little town of Memphis, Saunders county, is having a telephone war.

C. W. Buckner, a printer, was killed by the cars at Geneva, while attempting to board a freight train. There was a smail wreck on the

Northwestern near Arlington, in which seven cars were piled up, but no one

Herman Bolling, living three miles southeast of Papillion, has just completed the largest barn in Sarpy county. The cost is estimated at \$15,000. Richard Berlin, a prominent citizen of Omaha, was found dead sitting in

asphyxiated, accidentally, it is supposed, by gas. The farmers along the Platte river east of Ashland have been troubled somewhat of late by the nightly visits of a number of wolves from the hills

which flank the river. Postmaster Swanson at Fremont has received word from Washington that his request for an increase in the salary of the deputy postmaster from

\$1,000 to \$1,200 has been granted. B. F. Fletcher of Ashland has received words that certain lands owned by him in Wyoming have been discovered to contain large quantities of paying coal similar in quality to Shenandoah coal.

The Nebraska division of the travelers' protective association will meet in Fremont on August 1, for its first annual picnic. The posts at Lincoln, Omaha, Plattsmouth, Grand Island

and Norfolk will be represented. The Harvard Co-operative Grain and Live Stock company, with about 150 members, of which 140 are among the best farmers, has contracted with D. H. Cramer of Omaha for an elevator to cost a little over \$4,600.

The summer meeting of the state hall on the exposition grounds has horticultural society will be held in the court house at Fremont July 28 Taylor, formerly of the Nebraska and 29. The hotels of the city have State university, who is chief of the announced reduced rates. A display to, not because I prefer it.—J. B. Mar- to say that they are rapidly becoming agricultural exhibit at the exposition, of fruit and flowers will be made dur-

Captain W. T. Brownell, who has been following the sea for thirty-eight years, has given up the calling of a sailor and will return to his home in Three thousand square feet of space Fremont to remain with his family. in the horticultural building has been His last voyage was from Vancouver. secured, on which the fruits grown B. C., to London with a cargo of lum-

> Adjutant General Culver has received advices from Washington to the effect that the National Guard will not be required to hold a state encampment in addition to taking part in the regular army maneuvers in order to avail itself of the terms of the Dick militia bill. The maneuvers will take place some time in August.

The following list of mortgages filed and released in Sarpy county for the month of June: Farm mortgages filed, \$20,550; farm mortgages released, \$23,412.50; town mortgages filed, \$3,900; town mortgages released, \$635; waether or not a state building will chattel mortgages filed, \$8,001.64; chattel mortgages released, \$4,613.47. Governor Mickey has appointed a the state, and already has received between Iowa and Nebraska long subscriptions to this fund of about enough to find out just where the line their disposal. While this sum is not has been along the Missouri river large, it is hoped by the commission | which is constantly changing. He has appointed Charles J. Swanson of Oakhand, if the most of the services of land, Dr. F. O. Robinson of Hartington

and E. A. Lungburg of Wayne. The fine new bridge over the Platte

at Valley is about completed. Passenger train No. 3 on the B. & M. struck a light wagon in which John Winters and wife of Papillion were returning from South Omaha and demolished it completely. The two occupants of the wagon were caught on the pilot of the engine and carried until the train was brought to a standstill, some 200 yards from where the accident occurred. Mrs. Winters was taken from the pilot, dying soon after. Mr. Winters was not much hurt.

Washington dispatch: Secretary take the place of corn. Shaw has approved selections of property for public building sites at Grand Island and York, Neb. At Grand Island the government accepted the site offered by Emma Jauss, located at the southwest corner of Locust and Second streets, 132 by 132 feet, price, \$9,500. At York the site offered by George M. Post, at the corner of in the rows, using from 20 to 25 pounds Grant avenue and Seventh street, 20

by 125 feet, is purchased for \$9,000. Roy Harris, 12 years of age, died at of good quality per acre than we can his home in Plattsmouth with lockjaw. | now hope to get in any other way this He fell from a swing and sprained his late in the season. By using a corn spine very badly and went into convulsions, and has since been growinggradually worse until death relieved his intense suffering.

The volume of business in Fremont | When bound and placed in shocks that | pounds of ground phosphate rock per is keeping up well through the warm | are not too large it usually cures out | acre. On the other hand, 300 pounds weather, as is attested by the bank | quite well. By planting sweet corn of high-grade acid phosphate gave a | soiling and semi-soiling (that is, feedclearings. These amounted last week to \$146,482.16, being an increase of wound became worse and death en- \$24,824.48 over the corresponding week for last year.

The office of the state superintend-

ent of schools has prepared formal ad- in at this time are sorghum, millet, vertisements for publication in the public prints soliciting bids for the location of the new normal school which was authorized by the last legislature. The advertisements will state that the state board of education, which will examine the bids and locate the school, will be guided both by the amount of the bonus offered

advantages. The state auditor is receiving letters from many clerks asking when LINCOLN-Three members to rep. the books and blanks required under resent Nebraska in the foint boundary the terms of the new revenue law commission authorized by the states will be issued. He is informing the of Nebraska and South Dakota in the clerks that the old board of equalizalocation of the dividing line between | tion will not have any power to issue the two commonwealths were ap- the books required under the new law. The new board, which will consist of five members, will have to issue the new books. This body will meet October 15, to make the plans for success-



From Farmers' Review: During our 40 years of experience we have used pastures and find them profits ble. We find a cow to be a creature of education. If one dries off a heifer and lets her go dry for four or five months she will be inclined to repeat the habit. Most farmers depend wholly on pastures and make their calculations to use so many acres to a certain number of cows, and when the flush is over or a dry time comes their rations are curtailed, and hence the yield is shortened, and when a cow fails in her yield for a few days it is almost impossible to get her back to a normal yield again. A cow is simply a machine to be governed by a manager, and to be the most profitable she must have all she can his chair in his office. He had been eat and be taken good care of to do her best; hence, it is necessary absolutely to provide proper rations in case of short pastures to keep the machinery running profitably. This can be most economically done by providing silage for such emergencies or some succulent food such as alfalfa or sweet corn or green clover. The profit comes from the food used after a ration necessary to maintain the machinery and keep it in use: then whatever feed is used runs to profit and the yield is kept up much onger. We do not want to keep cows that are non-paying boarders for four or five months.-J. F. Converse. Jefferson County, New York.

> Selling Milk Exhausts Land. From Farmers' Review: For the last seven years I have sold my milk at wholesale to the Boston contractors. Previously for a time I sold cream, and before that butter. I consider it now more advantageous for a farmer to sell cream if possible than any other method of disposing of his product. Next I prefer butter, the small additional price secured for selling whole milk is not sufficient to make up for the value of the skim milk to the farmer, both for feeding and fertilizing purposes. The milk producers of this vicinity have been shipping the fertility of their farms to Boston for years: hence there is a general complaint of worn out lands. I sell whole milk because I am obliged

> > An Iowa Decision.

The Iowa courts have just decided very interesting point in regard to pleo having a slightly yellow color. It has been asserted and believed that butter could be incorporated with oelo. thus giving it a color legally. Some oleo very slightly yellow was seized in Iowa and the sellers prosecuted. The oleo men argued that the little color in the butter did not come in as a result of artificial coloring. The prosecutors contended that it made no difference how it got there. as long as it was present. The judge and the jury took this view of it.

Death of Missie 165.

Shorthorn breeders will learn with regret of the great loss sustained by Mr. E. W. Bowen of Delphi, Indiana. in the death last week of his celebrated cow, Missie 165, one of the finest examples of the best type of Shorthorn that ever entered the show ring. At the great International Expositions of 1901 and 1902, where were gathered the flower of the breed from all parts of the world, Missie was awarded second premium, her com petitor for first place being the undefeated Ruberta, who has yet to meet her match.

Summer Field Crops.

The Iowa Experiment Station is sending out some advice to farmers relative to the sowing of late field crops. In part the circular says: Unand planting all their land intended ruined the growing crop. It will be the middle of June before many can work their land, and the Experiment Station has had many inquiries about late crops to ultilize the land. If possible to obtain the seed a ninetylay corn, like Farmer's Reliance, Pride of the North, or Early Longfellow Dent, can be planted as late as June 20th with reasonable assurance of For corn hay for this season, select

the earliest maturing variety of corn you can obtain in your locality. It can be sown broadcast, planted or gether as you can with your corn planter, or if you use a corn drill apart and kernels 2 to 4 inches apart | ties. of seed to the acre. For roughage this corn hay is most excellent and it will probably give more rough feed harvester the crop is harvested quite easily. If sowed very thick a grain not be readily or easily cured if tioned or drilling in rows 24 to 30 inches apart, a very fine quality of fodder can be obtained which is greatly relished by all kinds of farm stock. Among other crops that can be put

kafir corn, soy beans and buckwheat. The Original Angoras.

The opinion of Mr. Schreiner, the South African authority, of a purebred Angora is as follows: I think i is certain that the original pure-bred white mohair goat was a small, very refined, delicate animal, of great beauty, clipping at twelve months' growth of fleece about from two to four pounds (according to age and sexkids considerably less) of dazzling white, fine, soft, silky, very lustrous mohair, curling in ringlets from 10 to 18 inches long, with merely the minimum of oil in its fleece requisite to the growth of hair of the highest excellence, so small in amount as to be inappreciable to the unskilled observer. It was perfectly clothed in every part; it had short, silky, curly hair about the face and down the lower parts of the legs to the hoofs; a soft, silky, curly "kuif" (tuft on the forehead), and small, thin, light-colored horns. The ewe was, of course. smaller and finer than the ram, and had only one kid at a birth (of this

there is abundant evidence).



When hogs follow steers that are be ing largely corn-fed, it is an element of profit to know how many hogs to keep with a certain number of steers. Though this is a matter that has been experimented with at a number of stations it still remains unsettled in large neasure. In the feeding tests being conducted by the University of Illinois, the writer noticed that four hogs were at first allowed to follow sixteen steers. Later the number was increased to eight, and Professor Mumford said that the eight were getting along as well as did the four. In a pasture it would be equally as bad if too few hogs were following the cattle. If too many were following them it would not be so large a matter, as they would naturally find pasturage to complete their needed ra-

tions. Just how many hogs should

follow cattle should be a matter looked

into thoroughly by every man that is fattening steers on corn and following them with hogs. In the case of the steers being fed it Urbana, Illinois, the feed was not whole corn, but a mixture of cracked corn, corn-and-cob meal, cut clover hay, cut alfalfa, all mixed together. It is altogether probable that this feed was better digested than is most of the feed when it consists largely of corn shelled or on the ear. It is evident that if eight hogs can profitably follow sixteen steers so fed, a much larger number could follow steers fed in the ordinary wasteful way. At Odebolt, lowa, the Iowa Experiment Station has 500 steers in feed lots with 500 hogs. We understand that the hogs receive no food except that obtained from the droppings of the steers. The end of this experiment will be watched with interest.

Anconas. Farmers' Review: The above is the name of one of the latest imported additions of poultry to this country. They belong to the Mediterranean type of fowls, having originated on a small island called Ancona, in the southern part of Italy, from which they take their name. Some years ago they were imported into England, where they now rank among the leading breeds; and I am very glad cou, Worcester County, Massachusetts. one of the favorite breeds of this couning much exercise and largely provirange. They do well in confinement. No cold, however severe, stops their egg production. The egg basket is never empty, as such has been my experience, and like the Mediterranean class are non-setters. Before breeding them I had heard wonderful reports of them as to beauty and egg production, the

> with surprising rapidity. In general appearance the Anconas resemble the Leghorn type, following them in build and carriage, as well as in their bright combs and vellow legs. In color they are mottled black and white, each feather tipped with white and the more even this mottling the better, particularly in the hens. The combs are bright red, upright in cock and deeply rented, while in the hen they fall to one side of the face. They are compactly made, the body is round and well formed; the face is a coral red; the ear lobes white or creamy white. They breed very true.-W. H. Branthoover.

truth of which has been fully verified.

assure you a flock of them is a most

interesting sight. The chicks develop

Soil Surveys. The national bureau of soils has laid out a large plan for its operations this year. Sixty areas have been mapped out, these covering a total of 27,850 square miles. The amount previously surveyed is 33,782 square miles. Together they cover almost every phase of agricultural industry practiced in precedented rains have prevented the United States. From these soil many farmers in lowa from preparing surveys are prepared lithographed maps drawn on a scale of 1 mile to for corn. In some sections floods have the inch, covering each area surveyed and indicating in colors the location and extent of the various soil types, and in the Western areas the presence and amount of alkali existing. The reports accompanying these surveys treat each area in detail, and relate to the history of settlement and agricultural development, climatic conditions, physiography and geology, descriptions of soil types, with origin and process of reaching maturity before the close of formation, crops grown, and yields, he growing season. Nothing can fully the crops to which soils are especially adapted, special soil problems, irrigation and drainage, location, origin, composition and distribution of alkali, alkali lands, agricultural methods in drilled. Plant the hills as close to use, cultivation, cropping, rotation, etc., and general agricultural conditions of the farming class, labor probplace in drill rows 36 to 42 inches lems, distribution, and market facili-

Differences in Phosphates. At the Tennessee Experiment Station pot tests were made with different kinds of phosphates. Cow peas and turnips were the vegetables experimented with, in conjunction with superphosphates, precipitated phosphate, bone meal, and ground phosbinder can often be used. Corn can- phate rock. The results with both crops showed no appreciable benefit mowed and harvested as we do hay. from applications of from 300 to 1,200 bone meal gave excellent results. For from the meal was found to be about equal to one pound from acid phosphate. The turnips, however, seemed somewhat less able than the cowpeas to use the phosphoric acid of the meal. Precipitated phosphate gave much better results than bone meal. The water soluble phosphate of lime gave excellent results.

> A Community Bull From Farmers' Review: I think the benefit to a community would be great, if the leading farmers that have dairy cows would combine and buy a first-class dairy bull to be used on their herds. He would soon pay for himself and the farmers would soon

two years.—James E. Gray, Clay coun-When green peas are not particularly tender, a little bicarbonate of soda and a few mint leaves will improve

have some good cows. It would also

be a good plan to make a change every

their quality and flavor. Mrs. Goodheart (to woman whose husband has just been sent to jail for wife-beating)-Why do you think your husband will miss you? Woman-He'll miss me because he can't bit me.



Starving Cattle Ticks. A bulletin of the Mississippi Station says: The longest time that we have een able to keep them alive is about three months. Prof. Morgan succeed-

ed in keeping them without food from eptember 14th, 1897, until January 26th, 1898, about four and one-half months, and during warmer weather about two months-from July 20th to September 15th. Dr. Schroeder, of the Department of Agriculture at Wash ngton, collected a number of female ticks February 3d, 1897. Eggs from these had hatched by March 11th, and many of the seed ticks remained alive until July 21st-four months and ten days-when they were placed upon a cow. A number of these were matured by August 13th, when they were collected. We thus see that these ticks remained alive more than five months. If we suppose that tick eggs can retain their vitality five and onehalf months and the seed ticks live five and one-half months without food before dying, we see that eleven (11) months would be the maximum time that a pasture could remain infested after removing all cattle. In this estimate, however, we make no allowance for their chances of being killed by cold, sunlight and heavy rains.

Polled Herefords. In 1898 Gen. W. W. Guthrie of Atchi-

son, Kan., showed a group of cattle at the Trans-Mississippi Exposition at Omaha that attracted much attention. These cattle had Hereford characteristics, minus the horns, and General Guthrie called them "Polled Kansans." They had been produced by crossing Hereford bulls on "muley" cows, inbreeding being avoided by resort again to Hereford stock. The bull shown was said to get a good percentage of hornless calves. Since then the interest has grown, the name Polled Hereford has been adopted, and recently the American Polled Hereford Cattle Club was organized, with headquarters in Des Moines, Iowa; Warren Gammon, secretary. The polled variation is not so common among Herefords as among Shorthorns, and this imposes a considerable disadvantage on one who attempts to fix it; but there are occasional registered Herefords that have never developed horrs. An effort is now being made to collect these animals into one herd and thereby form the nucleus for more extended operations. Such work is commendable and will be watched ding for themselves if allowed to with interest.—Bulletin 34, Bureau of Animal Industry.

Soaked Feed for Horses. It is often claimed that soaking feed, especially hard grain, renders it more easily masticated and improves its digestibility, says bulletin 170 of the Department of Agriculture. It is doubtful if the matter is as important with horses as with some other classes of farm animals. It has been found in experimental tests that healthy horses with good teeth digested dry beans and corn as well as the same material that had been soaked in water for 24 hours. Soaking or wetting feed may sometimes be of importance as regards the health of horses. According to the experience of an English feeder, chaffed straw, which was fed on account of a shortage in the hay crop, gave better results when soaked than when dry. The dry material caused colic and constipation. It was also observed that the horses relished soaked grain. It is believed that the dust in hay causes heaves. and, to avoid such trouble, both long and cut hay, especially clover, is very often dampened before feeding, to lay

the dust. Worms in Hogs. Recently while at the Iowa Agricultural College the writer noticed the ground in the hog yards littered with excreted intestinal worms. The keeper explained that he had just given the swine their semi-annual dose of worm medicine. He said that it was his observation that hogs were frequently sick as a result of intestinal worms, and that many times diseases arising from worms were named cholera. This would be the more likely to be the case, as a large number of hogs might be sick at the same time from the same cause. This cause of disease is too frequently overlooked, especially by the farmer that has only a few hogs and gives them little attention. When a hog eats well and yet remains to be. stunted it may be guessed that worms are at least a partial cause.

Skim Milk for Sows. On farms where dairying is an important industry and where there is an bundance of skim milk for sow and litter, it is not unusual for the brood sow to nurse a litter of pigs without nerself losing weight. In the absence of skim milk we find that the low generally loses in weight, however bountiful the supply of grain and green material.-J. F. Duggar.

Soiling Cattle. From Farmers' Review: Referring to the profitableness or otherwise of soiling milch cows. I would say that so far as we have pursued the practice of solling our cows, we have done so chiefly for lack of sufficient pasturage for all the stock we were keeping. Our pasture land is partially woodland and other untillable ground, which would be waste if not pastured. Through any of the other plats. Finely ground and night at the tarn, in addition to the grain) we have undoubtedly been cowpeas, 2 pounds of phosphoric acid | able to carry more stock, keep up the milk flow better, and kept the stock in better condition, than if they depended upon the pasture entirely. We think that there can be no universal rule as to whether it is profitable or not to soil milch cows or other cattle. If, as in our case, a man has land he cannot till but can pasture, it is certainly more profitable to pasture it periodically through the pasturing season, take the milch cows out of the pasture and soil them for a week or two until the pasture gets "caught up" again. When we do this, we generally leave the young stock (and dry Stevens.

Night Pasturing.

From Farmers' Review: I have tried both the yarding and pasturing of cows in summer and have found out that our cows did a good deal better by letting them run at night, as they like to take a bite after milking and sometimes one can hear the bell-cow grazing as late as nine o'clock and later. If a farmer had a place to give them some feed, yarding would be all right, but otherwise they will give better returns by letting them run.-Fred Tschudy, Green county, Wiscon-



Hand Pollinating. The Almighty created the vegetable kingdom, but he gave its dominion to man. To what extent this dominion has been given to him man himsel has not yet realized. It is evident that he has the power of molding the vege tables of this kingdom to a most re markable extent. Take for instance the sugar beet, which man found conaining 5 per cent of sugar, and has molded it till it contains 15 per cent, sometimes 20 per cent. It may be even possible to do better than that In our modern cabbage, the cauliflower and various kinds of turning we find it almost impossible to recognize the original wild forms, so much have they been changed. As yet the work of man has been with a few plants. What about the thousands that his hand has not yet attempted to

There is much hope to be placed in the cross pollination of fruits-especially in the pollination that is done by hand, for in that way definite results are attained. The possibilities of this work are very great. Hardy and high quality fruits may be combined, even though it may take years to get results that will be a fair reward for the labor and time expended in obtaining them.

In hand-pollinating, the flowers must be well understood. The amateur will soon learn that the ovary is the receptacle in which the seed is formed, that the pistil is the central cylindrical portion, the female organ of the flower, that the stamens are the male organs of the flower, bearing knob-like bodies on their tops, in which is the pollen that is to fructify the ovary through the pistil. The petals and the sepals are of no consequence to the pollinator. as they are only for the protection of the organs of germination. The pollinator selects a bud that is

about to open, opens it with instruments and removes the stamens. This is to prevent the stamens fructifying the ovary. If taken before the flower is open none of the pollen will have escaped from the stamens, nor will the ovary have received pollen from any other source. It requires a little practice to remove the stamens without harming the pistil and ovary, especially if the flower is small, but it can be done. The petals are also frequently of no particular value except to attract insects to assist in the work of pollination.

To get the pollen from another blossom is an easy task. A blossom should be selected that would open in a day or two. It is cut open and the anthers on top of the stamens removed. These are damp and are full of pollen. They should be spread on a paper and laid in the sun. When they are dry they will burst open and let out the pollen. This is applied to the other blossom by means of a fine brush, the pollen of course being placed in the stigma, which is the entrance to the ovary. A sack of considerable size should

then be placed over the fertilized blossom to prevent any other pollen getting into it. The sack should be removed after the fruit has set, and a bag of mosquito netting substituted. These will catch the fruit if it starts to drop and will be a means of identifying the crossed fruit at harvest time. A tag should be put with each pollinated fruit, giving the names of the varieties crossed.

Break Up the Crust.

When rain falls on heavy soils, the water penetrates it only slowly, as the spaces between the soil particles are very small. After the rain, the sun and the wind begin their work, and the evaporation from the soil causes it to form a crust. This crust, while preventing the air from reaching the roots of the plants, serves as a medium through which the water in the soil may the more readily pass off, without going up through the plants. The latter, therefore, often seem at a standstill in their growth. The water must not be permitted to pass out of the soil except through the plants if we are able to prevent it, and we can to a large extent prevent this by breaking up the crusts as soon as they form. This generally occurs after a heavy rain. The heavier the rain the firmer the crust is likely

We too often forget the great law of capillarity that is working in our time. When there is a down-pour a dent. plant may take up water if it be thirsty for it, but it is probable that it its cells with water minus food. Most | will find something for you later." of the water it takes is drawn up from the lower portions of the soil by water is surrounded by a larger bulk Mr. Lincoln a thing or two. of air and by these two the plant food in the soil is made available for is a soil with great power of drawing the sun and the wind as the pumps of field. the Lord to draw moisture out of the earth. The saying is largely true. mission as brigadier general." But these pumps should be made by leaves of our plants, that growth may appreciation of his own ability.

Rose Insects and Remedies From the time of planting look out for the slugs, later on the rose bug and the green caterpillar that delights to feed upon buds fust ready to open. White Hellebore, if fresh and pure is a safe poison, dust it on with the dew. Kerosene Emulsion, two parts kerosene, one part slightly sour milk, agitate till it forms a jelly, dilute with than to have the ground idle. We 20 parts of soft water. Tobacco water, Lawrence. Both of those gentlemen steep the leaves or stems till a tea of good color, spray upper and under sured me that Gen. Hooker did not of warrant, mandamus or other potent sides of foliage or apply it with a touch a drop of liquor that day." whisk broom or sprinkler. Be ever on the watch for the enemies, apply the in the custom house, remembers Gen. remedies freely but avoid covering Hooker well. He served under Hooker cows, if any) on the pasture.—Eugene the opening roses. Roses should be in the Eleventh Massachusetts, First cut every morning to remove the bur- brigade, Second Division of the Third den of the bush and to cheer some sick room, or a precious gift to some city friend; never allow any seed buds to remain on the bush except on Ross Rugosa.—Geo. J. Kellogg.

> An Illinois woman claims to have under which they are living. and sugar.

roni, spaghetti, baked bananas, etc., would begin to look for trouble. will be found agreeable changes.

LOVED GEN. HOOKER

Brave Commander of the Army of the Potomac was Popular with His "Boys"-How He Secured His First Commission in the Civil War.

"Hooker's brigade to the front!" There are at least 500 battle-scarred reterans in Boston whose blood still line. And the sign never failed. moves the quicker at the sound of fought with Gen. Joseph Hooker, one tim but seldom. I remember one time commander of the Army of the occasion, distinctly, however. It was Potomac—the brilliant soldier in commemoration of whose deeds an equestrian statue was unveiled on the State House Park June 25.

Col. Albert S. Austin is the only surviving member of Gen. Hooker's staff now living in Boston, and he was one of the youngest officers on that staff. "I lived in the same mess with him year and a half," said Col. Austin, I answered. "and I had for him an admiration and affection which few men I have met | we'll see if we can't find you a good have even been able to inspire.

"When I joined his staff as a first lieutenant I was young-very young 'ndeed, and Gen. Hooker's attitude wagon loaded with old sabres. They



stern father at times, but always one who had the youngster's interest in mind quite as well as his own.

"I can see him to-day as plainly as saw him then-a well proportioned man over six feet tall, figure as straight as an arrow, calm and collected always, yet with an eye that would occasionally reveal in a flash the mettlesome spirit within.

"Any one who ever saw Gen. Hookr on his white charger can readily appreciate the fitness of giving him an equestrian statue. He sat his mount like a centaur of old. I have seen some good riders in my day, but never one who looked more at home in the saddle than he.

"Everybody has heard of Gen. Hooker's old white horse. It was the wonder of all the troops why he rode such a conspicuous animal.

"Every time the general went into action, lots of us trembled for his safety, because we knew that the rebels were perfectly aware that he rode a white horse. Why he was never killed is a mystery, for he never had much regard for his personal safety during an engagement. "It was I who sold him that famous

old nag. The animal made his entrance into the army through the quartermaster of the Second New Hampshire regiment. The quartermaster found it impossible to mate the beast with any horses on hand and was at a loss to know what to do "I happened to be in need of a

horse at that time and bought the lone white beast, which at that time had never been saddle-broken. One day the general saw me riding the animal. "I remember once of hearing him tell about the trouble he had to get his services accepted at the outbreak of the civil war. When hostilities began he was in California. He hurried to Washington and called on the President, who received him kindly, but put him off with an indefinite answer. As near as I remember these are the He made several attempts to speak words he used in telling the balance

of the story: "'I went back to the hotel and waited. The days went by. New troops you on that awful errand." came into the city and went away, new men came and received commissions many of them men who had never seen | soldier and had too big a heart." service, while I, a West Point graduate and a man of considerable active er's brigade when that general resignservice, was kept on the waiting list- ed from the army, a disappointed and waiting for a chance to place my heart-broken man, in 1864.—Boston trained services at my country's dis- Journal.

"'Finally I grew sick of waiting. Battles were being fought and wonor lost-and I was shelved completesoils. Those who have not given at- ly. I made up my mind to return to tention to this matter imagine that California, since there seemed to be plants drink water in bulk. This is no show for me in the army, and benot true, at least for any length of fore I went I would call on the Presi-

as before, and seemed surprised that I takes up water only in a certain pro- was going back to California. "Don't portion to its food. It cannot gorge be impatient, colonel," caid he. "We "'But I couldn't take much stock in that after being kept waiting so capillary attraction, and the film of long, and I made up my mind to tell

"'I have been over to the Bull Run battlefield, Mr. Lincoln, said I, and I the plant. Now, the hard-packed soil feel bound to tell you one thing; I camped in the vicinity, made an atknow I am a damned sight better gen- tempt to discover the secret of the up water. Some one has described eral than the man you had on that

"'A day or two later I got my com-"General Hooker was a modest man to draw moisture out of the man in a sense, and yet he had a good

There is one point I want to express myself on through the columns of the Boston Journal. Stories have circulated in effect that vary from year to year, in accordance Gen. Hooker was a drinking man. Like with the fluctuations in the climate most other people he occasionally took a drink, but never when going into action. It has been said that he was Thinks Marriage License a Failure. under the influence of liquor at the battle of Chancellorsville. That was a lanta, Ga., recently decided to get marmalicious falsehood. I knew two offic- ried. He took out a license for himers on Gen. Hooker's private staff during that battle, Col. Candler and Major are now dead, but years ago they as-Col. Charles C. Rivers, an inspector

Army corps. "Gen. Hooker," said Col. Rivers, "was a man soft of speech and very neat in personal appearance. He was one of those men who always look well no matter what the circumstances

driven ants away from her lawn by "He always wore a 'dickie'—one o sprinkling their haunts with a mix- those high standing collars so fashture of equal parts of tartar emetic tonable forty or fifty years ago. That collar was known as 'Hooker's barometer.' Whenever we saw the 'old Once a day is sufficient to eat po man' come out of his tent with one

"The old man's collar says fight" would be the message sent down the "I was not on the general's staff those words. They are the men who and of course I came in contact with

when I was promoted to be second lieutenant. I needed a sword fitting to my new dignity, and I went to Gen. Hooker to get permission to go to Washington to purchase one.

"'So you want to buy a sword?' said he. 'Haven't we plenty of swords in "'Yes, sir, but not the kind I want

"'Come with me, young man, and

sword." "We went down where the stores were kept and finally came upon a rom the first was that of a father-a were ancient weapons, most of them relics of the Mexican war. I couldn't have wielded one of them with both

> "'Help yourself, young man,' said the general, waving his hand toward the wagon. "'But, general,' I protested, 'I could

> not lift one of those things, let alone "There was a twinkle in the general's eye as he answered. 'Ah, well,' he said, 'it is a race of puny men nowadays. Those were mere toys for the Mexican veterans. Well, young man,

> you shall go to Washington and buy you a sword, a pretty one with a leather scabbard." "Now his manner of saying this was so delicious that offense was impossible. He knew I was young and wanted a bright, showy sword, and he thought he would give me an object lesson in the style of arm used by the

> troopers of the Mexican war. "The general was as kind hearted as a woman. I remember that during the second battle of Bull Run Hooker's old brigade was sent against a fortified position that should not have been attacked by anything less than a whole division. The brigade sustained terrible slaughter-the loss was simply appalling.

> "The remnant straggled back and reformed. It was a heartrending sight -enough to make the spectators weep. restrain their tears. Such awful slaughter-such unnecessary decimation has seldom been the experience of any "As the men stood in line after the

> When the boys caught sight of him a mighty shout went up. "'Uncle Joe!' they cried, 'Uncle "I have never heard another such cry. It was a mixture of pathos and

pain and affection. It was the cry

of a sick boy to his father, the wail of

engagement, down came Gen. Hooker.

a lad sob-choked with grief and des-"With the rush of an avalanche, the men broke ranks and swept down on



with the tips of their fingers, murmur-

"Gen. Hooker was deeply moved. and choked. 'My poor boys,' he at last said, 'my poor boys, my heart bleeds for you. It was not I who sent

ing all the time, 'Oh, Uncle Joe, Uncle

"Right well they knew that without his telling them. He was too good a Albert C. Stacy was in Gen. Hook-

Ice Cave of Besancon. In several parts of the world there are caves in which ice is found in the middle of summer. In some of them the ice lasts only until August or September, and is renewed during the winter, but in other caves ice is found the year round. One of the most celebrated and remarkable of ice caves is situated near Besancon, France, in a hill about 500 feet high. The root of the cave is eighty feet high, and the floor is strewn with great icy stalazmites of such fantastic forms that they

are frequently likened to human and animal figures. The cave has been known for centuries, and in 1727 the Duc de Levi. who was in command of an army enice formation. He had all the ice removed from the cave in order to determine how soon it would reappear, if at all. It was found that new ice formed and accumulated very slowly. Sixteen years after the ice had been removed. the floor of the cave was again com shaped pillars six feet in height. The amount of ice in ice caves is found to outside

A young and impetuous lover in Atself and a girl whom he thought would make a good wife. Then he went to consult her about it. He produced the license and served it on her as a sort legal document. She said she did not want to marry. Her father agreed with her and held a gun on him, giving him his choice of the contents of the gun or a horsewhipping from the young woman. He took the latter and he gards the marriage license as a failure.

Queer Visiting Cards. In Corea visiting cards are a foot square. The savages of Dahomey announce their visits to each other by a wooden board or the branch of a tree artistically carved. This is sent on in advance, and the visitor, on taking leave, pockets his card, which probably serves him for many years. The natives of Sumatra also have a visiting card consisting of a piece of wood tatoes. Rice and other cereals, maca-side of that collar lopped over we about a foot long and decorated with a bunc's of straw and a knife.