DAIRY AND POULTRY.

INTERESTING CHAPTERS FOR OUR RURAL READERS.

How Successful Farmers Operate Th Department of the Homestead - Hint as to the Cars of Live Stock and Poultry.

Sweedish Method of Raising Cream. This is simply setting the milk at or near the temperature at which drawn and quickly reducing it to 45 degrees. says "Rocky Mountain News:" Mill when drawn is at the temperature of about 98 degrees, and the nearer it is to that temperature when set, the better the results will be. But if it is not allowed to fall below 90 degrees, before setting, the results will be satisfactory, if prompt and proper reduction of temperature of the milk is produced.

It must not be understood that all, or practically all the cream, cannot be raised if the milk is allowed to drop to a lower degree than 90 before setting, for it can be done. But in such practice it may be necessary to cool it to a lower temperature and perhaps a little longer time allowed for the cream to come up.

By practically all the cream is meant all but a trace of butter fat and is of butter. Some of the very smallest of butter globules are of no practical value, and they are the last to come up.

Failures to secure all the cream by the practice of the Swedish system, or attempt to practice it, have resulted only when it has been improperly practiced. And the most common cause for such failures has been the lack of proper reduction of temperature.

Many seem to think that if the water is at 45 degrees, that is all that is required. Now the water in which the cans of milk are set may be at the start 45 degrees, but as soon as it has an equalized temperature with the milk its power for cream raising has been expended, and it cannot accomplish more in that direction. The only thing then to be done, is to either change the water or put in ice. It would be better to do either a short time before the two fluids equalize temperature. If ice is used, it is of course better to put enough of it in at the start to reduce the milk to 45 degrees,

The Swedish system of cream raising can be practiced in any kind of a sheet metal can, the diameter, or width of which, is not too great-about eight and one-half inches should be the limit of diameter for a round can, or width of one oblong in form. But for cans of the latter form, a width of seven inches are practical, while round cans of the usual height, twenty inches, would not be convenient to clean, of a less diamefor than 816 inches,

The cans may be set in a common box or tank made water tight or even in a half section of a barrel,

At the north, the item of ice is any thing but a serious one so far as cost is concerned and there is no excuse for a farmer not to store it. There is no denying that the Swedish system can be more properly practiced if ice is used than it can be without it, this as a rule. With its use there will never be any trouble in getting all the cream between milkings and in fact in a much shorter time than the limit-say three to five hours. And when a vessel of very small diameter, or width, is used, it can even be accomplished in two hours. To test the truth of this statement fill a glass fruit jar with milk just drawa, and set it in a vessel containing water, and plenty of ice broken fine. If the milk is from a cow fresh in milk you will be very apt to see a distinct cream line in forty minutes and have all the cream to the surface in less than double that number of minutes. This is an experiment that any one can easily make and it will prove an educating one.

Opinions on Incubator Management, Most persons recommend cellars for incubators, and that is where I ran an incubator for two seasons, a good part of the time without much success writes S. D. Gratigny in Midland Poultry Journal. A dry cellar is all right, but who has one? Did you ever see a dry cellar? It may seem dry for a short time, but stay in one for several hours or try to sleep in one and you will find out before morning how much dampness there is in a dry cellar, Now, eggs exposed to that dampness for three weeks must absorb considerable moisture, something they do not get under a hen, and something that will cause a large number of full grown chicks in the shell that could not get out. To leave the cellar door or window open will not do; the cellar watid be subject to very sudden outside ther- all tubercuious animals are exterminmal changes that the regulator could atea. not meet and you would have a night job in addition to your day job without any extra pay. A good veatilator foot from the floor of the cellar and ex- ment, which is discussed by A. A. Mills, tend to the roof of the house, with a cap is the amount of water to use for difwould cause a swift current of air lows: which certainly would carry off a large amount of dampness and add to the sanitary condition of the cellar. Such a ventilator could be placed in the wali and would not take up any space in the cellar. As that method was inconvenient for me I tried another. I put two sacks of lime, about two bushels, in the cellar, and the next hatch I had was a good one. The air chamber in the eggs when the chicks were ready to hatch was the largest I ever saw. Lime will absorb a wonderful amount of moisture and is the cheapest remedy for | 27 hours nearly. that purpose of which I know, after could be put in while the building is being put up with little expense.

I never tried a hot air machine in a cellar, but imagine they are more suitable for a cellar than a bot water incu-

Instead of pitting in moisture, as per Mr. Rankin's instructions, I had lots of

trouble in keeping it out.

I filled machine with duck eggs once and put in moisture on the fifteenth day. A large number of the ducks poked their long beaks through the shell and laid there and died; they were so large they could not move. When I cleaned the machine out there were almost a hundred eggs with the long beak sticking out like a pump handle, only not so long. When I began fighting moisture instead of furnishing it I began to get good hatches. decreased the crop nearly one-half.

Another great trouble is to get eggs in winter that will hatch. You might as well throw your money in the river as to buy eggs up here, there and every place, as they will hatch very poorly, PAMUNKEY TRIBE OF INDIAN and what chicks do hatch will not pay for what they eat. You must mate up the hons yourself, keep them in a warm place, gather the eggs before they get chilled, and keep them at a temperature of not over 60 degrees nor less than 40 degrees. You should have a brooder ready for them two or three days before the chicks are hatched. have the temperature 100 degrees, and never allow it to get below that until the chicks are feathered. If you do this you will not lose any chicks on account of improper heat or by crowding or with bowel trouble, unless the latter is caused by improper food or roup. Another very essential point is to keep them busy. If you have them in a brooder house or small pens make them scratch for almost all they get. If they have a free range in good weather and are not overfed they will take enough exercise. It is an easy thing to raise them in warm weather on a free range, but raising them in winter in a brooder house is another thing. I had best results by feeding small amounts often. If a small handful could be thrown to fifty chicks in litter every hour it would imitate nature nearer than to feed three or four times a day, or even every two hours. Feed a variety, but never feed doughit will cake and sour in the crop, and cause severe diarrhoea. Shorts, mid-

night. More food will digest with the crop kept half full than if kept full. If there is any secret in raising young chicks it certainly is in keeping them

dlings, oatmeal, corn meal, bran, etc.,

mixed raw, will make dough, and should

never be fed unless cooked. A cake

made of corn meal, oatmeal, bone meal,

eggs, and meat chopped fine, mixed

with sour milk, and baked like corn

bread, is hard to beat for the first week.

They should never be allowed more

than half what they will eat except at

warm and busy. The last hatch I had was 154 chicks and raised 150. Mercury was 8 degrees below zero the day they were taken out of the incubator. I aimed to have the thermometer at 105 to 110 degrees every night when I left it, allowing it to fall 10 or 15 degrees before morning without injury to chicks. If you leave the mercury at 100 and it falls 15 degrees by morning the weak ones will be crowded to death. So it is best to leave it a bit high or get up at midnight and turn on more heat. One hundred and ten will not burt strong chicks. and if they are kept busy they will be strong. A strong chick will crowd away from too much heat, while a weak, lazy one will try to soak up all the heat it can, and don't seem to have sense or energy to move to a cooler place, but it is not slow to move to the warm-

est place it can find. As long as I kept the temperature at 85 to 90 degrees I threw out at the rate of ten dead chicks a day. When I began keeping them warm-100 to 110-I began raising broilers instead of burying dead chicks.

Tubercle Bacilli in Milk.

Dr. Samuel G. Dixon of the Academy of Natural Sciences, Philadelphia, who is an acknowledged authority among microscopic savants of this country.

"I have no hesitation in stating that our people are unnecessarily alarmed regarding the danger of contracting tuberculosis from cow's milk. . . . In talking with the lay people I find that they do not realize the fact that a large majority of the bacteriologists of the world have searshed most diligently for the tubercle baciflus in the milk of cows suffering from consumption. and as yet have only found the germs in that taken from animals affected with tuberculosis of the milk glands and ducts, which result is coupled with the fact that comparatively few tuberculous animals, particularly those suf-

The above opinion coming from so high an authority is worthy of great confidence. It also corresponds squarely with the views of Dr. Cressey of Connecticut, one of the first veterinarlans of the country to study tuberculosis in cattle. Dr. Cressey still affirms that milk in the early stages of this disease is not affected, and therefore not dangerous until the milk glands become involved, in which case the disease manifests its presence by disordered conditions at once noticeable.-Maine Farmer.

In spite of all this, however, we do not care to use milk or butter from tuberculous cows, if we know it, and the agitation should be continued till

Farm Irrigation.

Bulletin 39 of the Utah Agricultural would do away with the excess mois- college experiment station treats of ture and should be built so as to pre- farm and orchard irrigation. It reports vent any cold air coming in. A long results of a number of irrigation exbox, say one foot square, open at the periments, most of them covering a lower cud, which should be about one period of five years. The first experion top to prevent rain from falling in, ferent crops, and is summarized as fol-

1. On clay soil the maximum yield of both wheat and straw was obtained by saturating the soil, approximately, two feet deep at each irrigation, or covering the ground with 26.82 inches of water during the season.

2. On this soil there was a decrease of crop where either a more or less amount of water was used.

3. The maximum yield was secured by the use of 26.82 acres-inches, which is equivalent to a cubic foot per sec. for

4. Though the water that drained your building is up, but the ventilator from the soil through excessive irrigation was richer in fertilizing material than when applied, the total amount of this material added is more than that extracted.

> 5. On clay soil containing more sand the yield of grain (wheat) increased as the water increased up to 40 inches, while the maximum yield of straw was produced with sixteen inches of water. 6. On clay soil containing little sand timothy gave mixed results, though

where the maximum amount of water

(41.3 inches) was used the yield was the greatest. 7. On clay soil containing more sand the first crop of clover increased steadily and rapidly from the use of 4.2 inches of water up to 12.9 inches. The application of 5.2 inches more of water

STOP INTERMARRYING.

The Custom Threatened the Perpetua tion of the Race-They Now Want to Intermarry with the Eastern Cherokey Tribe.



MODERN instance of an entire nation or people in search of eligible wives and husbands by the wholesale just now furnished by the interesting but little known tribe of Pamunkey Indians who live in of the tide

ties of Virginia, and are indeed literally the "first families" of the Old Dominloc, being lineal descendants of the true aboriginies. So blue and exclusive, in fact, is the Pamunkey blood, so unmixed through centuries with any other strain, that the tribe is dying out and experiencing the urgent need of a matrimonial alliance with some outside stock to preserve the root. The detrimental effects of continued inter-marriage tetween members of the tribe have become apparent to them, but inasmuch as they scorn a union with their white as well as their negro neighbors, they are in a dilemma as to what steps they should take to restore the blood of their tribe and save themselves from extinction. It is a case like that of the primitive Romans and Sabines, but thus far no Sabine women have been lured among them and captured,

Under these circumstances the head men of the Pamunkey tribe have opened negotiations with the eastern band of Cherokee Indians in the adjacent states of North Carolina, Tennessee, Georgia and Alabama to procure brides for their unmarried sons and husbands for their unmarried daughters. The male Pamunkeys understand the eastern Cherokee women to be exceptionally pretty, modest and sensible, and the female Pamunkeys regard the eastern Cherokee braves as handsome, loyal and industrious, calculated to their prestige vanished, they still illustrate in themselves the law of the survival of the fittest.

This precious tribe live in a queer set tlement called "Indian Town," in King William county, Virginia, twenty-one miles due east of Richmond, and one mile east of the historic "White House." where George Washington was married to the beautiful widow Curtis. Their reservation, comprising 800 acres. ceded to the tribe by the ancient colonial assembly of Virginia, is an oddly formed neck of land almost entirely surrounded by one of the serpentine curves of the Pamunkey river, not far from its debouchment into York river. The place is connected with the mainland by a narrow strip of sand the isolation and protection afforded by this peculiar situation have no doubt saved these Indians from extermination. About onethird of the reservation is good farming land and the remainder consists of woods and low swamps, well stocked with deer, raccoon, otter, muskrats. mink, redbirds, wild geese, ducks and

There are now 90 Pamunkey Indians actually present on the reservation proper and 35 more residing on another small reservation 12 miles northward, on the Mattapony river, besides 29 others employed in service as boatmen on steamers plying the Virginia rivers, making a total of 145 Pamunkeys now living. In appearance they are distinguished by the usual copper-colored skin, high cheekbones, straight, coarse hair and dark eyes. They are not particularly strong or robust, and their average longevity is somewhat lower than that of their white and colored neighbors.

The eastern Cherokees, toward whom the Pamunkeys are now turning longing eyes, are a vigorous, thriving people, occupying territory of their own in the southwestern part of North Carolina and contiguous portions of Georgie, Alabama and Tennessee, numbering 2,885 souls. There are 1,520 of them in North Carolina, 936 in Georgia, 318 in Tennessee and 111 in Alabama. All are self-supporting citizens, moral, lawabiding, industrious, comfortably fixed, and wear citizens' clothing. The only aid they receive from the United States | and success he is the peer of any of government is for their schools. The them, and from some points of view he males and females are about equal in number, and inasmuch as a considerable portion of each are still unmarried, it can truthfully be said that there is make model husbands. Correspondence | albeit of marriageable age, they fulfill | not a drop of water in its stock or any

urged by the people of both Missouri and as a candidate in 1894 he overcame his opponent had received at the previous election and claims the seat on the ground of frauds at the polls which have been admitted by the opposition to an extent that leaves little doubt as to the outcome. As a politician Col. Van Horn has been accorded great skill and sagacity, and for more than twenty-five years he has been an influential member of the national or

T. B. BLACKSTONE.

The President and Principal Owner of Great Rallway. Timothy B. Blackstone, president and principal owner of the Chicago & Alton



occupied a prominent position among the great railroad magnates of the west, and, it might be added, of the country. In point of energy, ability excels all the rest. The Alton is about the only road in the country of which was begun about a year ago with the in the judgment of the Pamunkeys, all other of its securities. It is the only

TRICK OF MEMORY and Kansas as secretary of the interior under President Hayes, on account of his familiarity with western affairs. He THE NAME THE DOCTOR COULD was again elected to congress in 1878, a majority of more than \$,000, which For Forty Long Years He Valuly Scarchod His Brain for It-The Story That So Suddenly Lost Its Point-Principle of Psychology. Rev. Cyrus Hamlin, who as a missionary resided for more than forty years in Turkey, and was the founder and first state committees of his party. president of Robert college, in Con-

which has an interesting bearing on the question of memory, says the Washington Star. It is a familiar contention among road for more than thirty years, has psychologists that an incident once thoroughly presented to the human mind cannot be effaced from memory. But for many years Dr. Hamlin thought he had proof of an exception to this law. After he graduated from the theological seminary and had decided to devote his life to missionary work, he visited Philadelphia on business connected with his work, and while there was introduced to a gentleman, who, being much interested in missions, genz crously rendered Mr. Hamlin financial assistance, which enabled him to carry

T. B. BLACKSTONE. patron, but curiously enough he found it impossible to recall the gentleman's their interviews, even to the street and number of the house in which he had fived, was as plain to him as if it had been but yesterday that the events occurred, but to save his life he could not think of the gentleman's name. As time went on this lapse of memory became so persistent as to cause him considerable annoyance, and he adopted all sorts of expedients to bring back the name. He would take the letters

> her, the convergation which had taken place between them, but still he could not recall the name. When after thirty years he returned to his native land on a visit, he took the trouble to go to Philadelphia, in order to settle the question which had been puzzling him for so long. He visited the house, but found only strangers, who could tell him nothing of the people who lived there so many years before. So, finally, Dr. Hamlin abandoned the search, thinking that here at last was a case where something had been thor-

NOT RECALL.

stantinople, has collected a number of

incidents connected with his residence

in that country. Among them is one

on his work to better advantage than

It was 30 years before he again visit-

ed America, during which time he had

married and a family of children had

grown up around him. None of these

having ever visited the father's native

land, they were naturally curious to

tearn all he could tell them of this

country, and were, of course, especially

interested in incidents connected with

his own life. Among other stories he

often related the one concerning his

name. Every incident connected with

of the alphabet one at a time, and think

over all the surnames he had ever

heard, but to no avail. Then, in his

imagination, he would start down the

street where his friend had lived, enter

his house, go through with the cere-

mony of introduction, and repeat word

for word, as nearly as he could remem-

ne could otherwise have done.

and as thoroughly effaced. One night, when he had returned permanently to this country, he attended a large dinner, where were present several distinguished psychologist. During the evening the conversation turned upon the subject of memory, and the well known scientific principle was discussed. This was too good an opportunity to be lost, and Dr. Hamila proreceded to relate his experience at length as an example of the opposite view. namely, that incidents could be theroughly effaced from memory. He was, of course, listened to with great interest, and as he approached the end of his story, he said with great impressiveness: "Gentlemen, there is an incident presented to my mind more than forty years ago, and I have not been able to think of the name of Capt. Robinson

oughly presented to the human mind

from that day to this." When the climax was greeted by a hearty burst of laughter, the worthy doctor looked around in great astonishment, for he thought he had told a pretty good story, and could see nothing to provoke mirth. It was sometime before he saw that he had been "condemned out of his own mouth."

Backing Steamers by Night. Heretofore every vessel arriving at quarantine, after sunset, has been prevented from reaching her pier till the next day. Fassengers on steamers arriving at quarantine even before sunset ere often put to great inconvenience after the vessel is docked by a delay of the custom house officials to examine and pass their baggage. All such delays and discomforts will now cease. Passengers upon reaching the city at night will receive early attention from the customs officials and will not be obliged to stay on board the ship all night. Powerful electric lights will be supplied for inspecting immigrants at quarantine after dark. And the United States treasury department will co-operate with the health officers in expediting the landing of ocean-going passengers and their luggage in every way possible.

Points on Etiquette.

Ladies may remove their hats or not at a luncheon, but the present fashion is in favor of keeping them on. The absolute as her right to wages. To A distinguished Austrian lady, the have one standard of courtesy toward the guest and another toward the servant is to be snobbish indeed. Only the most extraordinary circumstances can justify one's being late to a formal sumably, the hostess will not be in readiness to receive you. Ten or fifteen minutes in advance of the hour is quite enough. It is suggested that a and small plates on the dinner table, especially if guests are present who are accustomed to dine simply at home savors of valgarity. It is better in such cases to bring fresh supplies of the articles as each course is served. Other wise emberrasement is apt to en



A GROUP OF CHEROKEE BELLES.

chiefs of the eastern Cherokees as the result of repeated conferences on the subject biween rpresentatives of the Pamunkeys and Commissioner of Indian Affairs Browning, at the bureau of Indian affairs in Washington, and inducements were presented to the mountaineer Cherokees in North Carolina to send on a select consignment three emissaries of the Pamunkey tribe fering from incipient consumption, are departed for North Carolina to visit Principal Chief Nimrod J. Smith and



A CHEROKEE MISS

other head men of the eastern Cherokees in person at Bird Town, Wolf were so greatly needed at home to direct Town, Soca and Big Cove, and bring the destinies of the wavering state, the negotiations to a favorable conclu- however, that he was elected to the Whether the hardy Cherokee mountaineers will consent to ally themselves with the Pamunkey dwellers at tidewater without too flattering inducements is doubtful, but the Pamunkeys themselves are confident of success and hope for a speedy infusion of new blood into their tribe.

This plight of the Pamunkeys and the peculiar conditions that give rise to it are the more noteworthy from the fact that the members of the tribe are the lineal descendants of the old Powhatans of the days of Captain John Smith and Pecchentas, dwelling on a part of their original hunting grounds. and representing all that is left of the once powerful aboriginal confederacy which gave the early Virginia colonists so much trouble, until expelled from the Jamestown region in 1644. Their progenitors possessed the land when Captain Newport in 1607 founded Jamestown, the first permanent English settlement on the American continent. Consequently the present Pamunkeys are the real "blue bloods" among all the Indians surviving in this country today, and they form the largest remnant of the old Algonquin stock now to be found on the Atlantic coast, Only a few triffing offshoots and uncertain and feeble strains of blood remain of the other Powhatan tribes. The Pamunkeys alone have survived intact the encroachments of civilization, and although their manners are now modified, their blood impoverished, their language lost and

the needful requirements for the desired inter-tribal matrimonial alliance. The young male Pamunkeys are particularly destrous of wives from among the eastern Cherokee maidens, and at the same time the female Pamunkeys, while less demonstrative in outward manifestations, are likewise anxious to secure eligible husbanda from the same of eligible girls and youths. Last week | tribe; so that if all goes well in the pending negotiations down in North Carolina, both classes hope to be agreeably suited.

ROBERT T. VAN HORN.

The Man Who Is Contesting for Tarsney's Sent in Congress.

Few men have taken a more active part in the development and progress of the great southwest than Hon. Robert T. Van Horn of Missouri, who is a contestant for the seat of John C. Tarsney in the coming congress. He was born in Pennsylvania, of revolutionary stock, in 1824. He became a printer while still a boy, and in 1823 became a resident of Kansas City and founded the Journal newspaper which, under his long editorship has been one of the leading commercial and political papers of the west He was elected major of Kansas City in 1861 on the Union ticket and soon after organized the first troops for the union army raised in western Missouri. He was major and lieutenant colonel of the Twenty fifth Missouri Infantry and made an excellent record at Lexington, Shiloh, Corinth, and participated in many important movements in the south and southwest. His services senate of the state while still in the field, and in 1864 he was elected to con-



ROBERT T. VAN HORN.

gress. As congressman he was untiring in his efforts to build up the west and originated many measures of great importance to the rapid settlement of the vast territory. He served in congress two terms, and was later strongly

siderably less than its actual cost of construction and its intrinsic value., Mr. Blackstone is a native of Connecticut. He was born at Beauford March 28, He spent his youth on a farm and laid the foundation of his education by attending the district school in the intervals when farm work did not claim him. Later he was sent to one of the best known Connecticut academies, which he attended until his health broke down and he was compelled to seek occupation which would give him outdoor exercise. He joined an engineering corps engaged in surveying and locating the New York & New Haven road. He began as a rodman, but in due time graduated as a thoroughly trained, skilled and practical civil engineer. He was appointed assistant engineer of the Stockbridge & Fittsfield road and was afterward connected in the same capacity with the Vermont Valley road. In 1851 he came west and took charge of the construction of a section of the Illinois Central. His headquarters were at LaSalle and the restdents of that place elected him mayor, which is the only political office he ever held. In 1856 he was appointed chief engineer of the Jollet & Chicago road, out of which the Chicago & Alton has actually grown. He was elected president in 1861, and three years later, when the road became part of the Alton system, he was chosen president of the new company. At that time the road had only 250 miles of tracks. Its present mileage is over 1,000 miles. Mr. Blackstone has always been alert to adopt new improvements. It was an Alton coach which was transformed into the first Pullman sleeper and it was on the Alton the first dining-cars were run. Jeffersonian simplicity is marked characteristic of Mr. Blackstone. He is easier of access than any other railroad president in the country. He is large-hearted and generous to a fault and recently established a public library to the memory of his father in his native town.

road whose total capitalization is con-

A DISTINGUISHED VISITOR.

The Countess Kullman of Austria Now right of the servent to civility is as

in the Country. Countess Kullman, is now in this country, accompanying His Excellency Nawah Imad Nawaz Jung Bahadur, of Hyderabad, and his wife, who are visiting America for the first time. The countess is returning to Vienna from a visit | dinner or luncheon. On the other hand to the orient, and the party arrived in do not put in an appearance an hour San Francisco on the City of Peking | before the time appointed, as, presome time ago. The countess' husband, Count Kullman, occupies a high posttion in the Austrian court. She is not one of the nawab's party, but has been the traveling companion of the nawab's wife since they were accidentally multiplicity of knives, forks, spoons thrown together at Hong Kong. She will accompany the nawab and his wife to Europe.

Stops in Hot Weather. A Spanish paper in the Pyreneer regularly suppends publication in hot weather.