



POULTRY

Quarantine Among Brooder Chickens. (A. B. R.)—Can you tell me how to prevent cannibalism among brooder chickens? I have a lot of eight days old chicks that are doing nicely except that they have already killed one of their number and scattered three others. They attack the victim around the vent and keep picking it until it is dead. They have had an abundance of grit and oyster shell all the time. Thinking the lack of animal food was the cause, I have given two feeds of green bone, but I don't see that it has done any good. The trouble is not peculiar to brooder chicks. I had some cases with chicks with hens a number of years ago. I am not sure that I am right as to the way the trouble begins, but think it is when a chick, because of irritation at the vent, such as might be caused by any bowel disorder, picks itself there until blood appears on the skin. When this happens, it is not as the others, and they begin to pick and get a taste of blood, they keep it up. It is possible that even when no blood has started the chicks seeing one of their number peck at it and eat some of the feathers, but I have seen little chicks, only a few days old, literally tear themselves to pieces without aid from others.—Farm-Poultry.



DAIRY

Irish and Danish Methods. Let us draw a contrast by picturing one of our own creameries about 7 o'clock a. m., and any creamery in Denmark at, say 6 o'clock a. m. So we see in the former? Is not the creamery surrounded by a double line of men, women and children, all either fighting their way to the receiving platform or else scrambling for skim milk, and altogether creating the impression in the mind of a stranger that certain political issues were involved, rather than the carrying on of an industry whose object is the improvement of our social and economic conditions? In the latter case we see one large two horse spring wagon loaded between thirty and forty medium sized cans, beside the receiving platform, and one man standing on it unloading the cans, which are taken in by one of the dairymen. When the first wagon is unloaded, matters are regulated that another spring wagon either in the creamery or on the road. While one wagon is being unloaded, the other is being loaded with skim milk. The two pictures constitute a striking contrast. May we call them "Peace" and "War"? No doubt.—Irish Homestead.



HORSES

New Advertisement for Stock Feed. A communication from the Pennsylvania station says: A sample of bran was submitted to the experiment station, a short time since, for examination, with the statement that horses and cattle would not eat it. Chemical analysis showed the presence of 8 per cent of protein and nearly 36 per cent of fiber or woody matter, whereas average bran contains 15.5 and 9 per cent, respectively, of these constituents. Particles of yellow, tough, parchment-like substance were present in large quantity; they proved, upon microscopic examination, to be portions of the inner seed-coat of the coffee berry. This has recently been put upon the market as a cattle food under the name "cornaline," according to analyses by the New Jersey experiment station it contains only 2.5 to 3 per cent of protein, .5 to .7 per cent of fat and about 60 per cent of fiber; so that it has an extremely low value for feeding purposes. Dr. Winton, of the Connecticut experiment station, to whom a portion of the sample was sent for examination, states that he had received, from a day or two earlier, a sample of bran from Massachusetts that proved to be adulterated with the same material. Its microscopic appearance is highly characteristic; the inner seed-coat of the coffee having, when magnified by thirty or forty diameters, a peculiar marking that most resembles that of the skin on the ball of the fingers. No other such adulterating substance is this distinctive marking.—Wm Frear.



AGRICULTURE

Source of Melon Supply. From the Farmers' Review: Large quantities of cantaloupe of various varieties are raised in the central and southern portion of this state unless the crop is injured in some way by climatic conditions. Our main early supply, up to two years ago, was grown in this section. Extreme southern sections of the country are going into the business very heavily this season, yet their product will be out of the market by the time the cantaloupe from the Illinois crop under our home product is ready for shipment, unless for some reason the quality of the home-grown is poor. Large quantities of watermelons are grown in the Central Illinois district, and the last of the season crop is crowded out of our market when the Illinois stock begins coming, on account of the difference in freight. Indiana also ships quite heavily to this market at about the same time the Illinois crop is being marketed. The Kentucky cantaloupe grown in Colorado are of superior quality to those grown farther East, unless climatic conditions are bad during the ripening of the melons. Crop was short last round last season and very high prices ruled. The acreage for the season, and it is probable that results will be satisfactory to growers, although consumption has increased very largely in the last few years.—C. H. Weaver, Chicago.



MILITARY

Song of Gladness. Sing away your troubles and soul-disturbing fears; Sing away your sorrows, ye hearts, and your tears; Let the sunshine follow you thro' all the coming year; Sing a song of gladness forever. Look above the trials that abound on every hand; Keep a stock of courage always at command; Some time in the future you will understand— Sing a song of gladness forever. When the day is gloomy, songs will make it bright; When the burden's heavy, smiles will make it light; Sunset will follow in the trail of darkest night— Sing a song of gladness forever. Just a song of sunshine—let it flood the heart; And the bars of sorrow it will rend apart; Whisper words that courage in some soul will start— Sing a song of gladness forever.



DECORATION DAY EPISODE.

Where 129,838 Soldiers Fell. The greatest and most historical battlefield spot in the world is that in and around Fredericksburg, Va. A comparatively small territory in this region would take places where were fought the great battles of Fredericksburg, Spottsylvania, Chancellorsville, Wilderness, and the Wilderness. Chancellorsville, the Wilderness, Spottsylvania, and the Wilderness, Todd's Tavern and a half dozen smaller but hardly less bloody struggles. More than 600,000 troops were engaged in these battles. The total losses in killed and wounded at these battles were 129,838, besides an immense number of deaths from disease. In the official data collected by Col. Fred H. Fox, in his statistical record, the figures of the losses at Fredericksburg and other important battles in the vicinity are given as follows: Fredericksburg, Dec. 13, 1862, Union loss, 12,353; Confederate loss, 4,572; Chancellorsville, Union loss, 16,000; Confederate loss, 12,281; Wilderness, Union, 37,373; Confederate, 11,400; Spottsylvania, Court House, including Laurel Hill, the Bloody Angle and Ny river, Union loss, 26,461; Confederate, 9,000. The general officers killed in these engagements were: Union, Maj. Gen. John Sedgwick, Hiram G. Berry and Amiel W. Whipple, Brevet Maj. Gen. James S. Wadsworth and Alexander Hays, Brg. Gen. George D. Bayard, Conrad F. Jackson, Edmund Kirby, James C. Rice and Thomas G. Stevenson; Confederate officers of prominence killed were Lieut. Gen. Thomas R. Cobb, Julius Daniel, Abner Perrin, Maxey Gregg, E. F. Paxson, J. M. Jones, Leroy A. Stafford and Micah Jenkins.

Fifty Yards. We talk about cleanliness in the dairy, but let us not forget about cleanliness in the poultry establishment. Dirt and disease seem to go together in all places. Filth makes a good medium for the development of disease microbes. If a hen house and yard are kept clean there is a solid reason for the absence of disease that sweeps away the fowls. Very often the part of the yard directly in front of the hen house door becomes very filthy. This is especially so in the spring and fall when the precipitation is considerable. This is not to be done with small ones. No matter how large the run for the poultry, the birds need a good deal of their time near the poultry house. They seem to have but little aversion for splashing through soft mud. Sometimes they will eat up every green thing within a dozen feet of the hen house door and leave the green sward farther away. This is more so with the large breeds than with the small ones. The solution appears to be small socks.

Pasteurization of Milk. A series of experiments in continuation of those conducted in previous years, was carried on this year, with a view to determine the effects of different pasteurizing temperatures, between 140 and 200 degrees, on the bacterial content of milk, and upon the quality of the butter. Briefly, the results indicate that a temperature of 150 to 185 degrees is very favorable in getting the bacterial content to a low point, and this temperature also adds keeping quality to the butter. If we wish to establish a good reputation for Canadian butter in the British markets, we shall wish to adopt this pasteurization and if we wish our butter to retain its fine flavor for some time, we shall do well to pasteurize at a temperature of 180 to 185 degrees. In our experiments, the whole milk was pasteurized, and the cream and the skim-milk was run over a water-cooler before it was returned to the patrons. We found that this plan enabled us to send to the farmer a good quality of skim-milk for feeding purposes.—Report Ontario Experiment Station.

What is Stock Feed. The following table shows the number of pounds of digestible nutrients in 100 pounds of both corn and wheat: Protein, hydrates, Fat. Wheat. 10.3 63.2 1.7 Corn. 7.3 66.7 4.3 The superiority of wheat over corn for young stock evidently lies in the extra amount of digestible protein which it contains. As seen above, each 100 pounds of wheat contains 10.3 pounds of digestible protein while the same quantity of corn has only 7.3 pounds. This shows the wheat to contain 30 per cent or almost one-third more protein than the corn. The wheat also exceeds the corn. The pounds per 100 in the digestible carbohydrates (starch and sugar) are also in favor of wheat. The protein content of wheat is also superior to that of corn for fattening comes from its extra per cent of fat to the protein as compared with wheat, the corn having about 10 pounds of these two ingredients to each pound of protein, while the wheat has only 7. The fine staling obtained better results from feeding ground wheat to dairy cows than from corn meal. Both were fed in connection with timothy hay. I am convinced from a number of years' experience in feeding wheat to dairy cows at the Utah station that it is fully equal to corn, if not superior for that purpose.—Luther Foster, Wyoming Station.

Advantages of "Soiling". Prof. W. A. Henry, in his book on "Feeds and Feeding," says: "By soiling" is meant supplying forage fresh from the fields to farm stock more or less confined. The first American writer to bring this subject to the attention of our people was Carl John Quincy, whose essays in 1820 were later gathered into a book entitled the "Soiling of Cattle," now out of print. Quincy points out six distinct advantages from soiling: First, the saving of space; second, the economy of feeding; third, the economizing of food; fourth, the better condition and greater comfort of the cattle; fifth, the greater product of milk; sixth, the attainment of manure. According to this author, there are six ways in which farm animals are wasteful. Quincy reports his own experience where twenty cows, kept in stalls, were fed green food supplied six times a day. They were allowed exercise in the open yard. These twenty cows required for feed, wheat and corn, sixteen acres of land, where fifty acres had previously been required.

Officers and Their Men. "Some of the company's officers," said the major, "had in the first year of the war original methods of maintaining discipline. I remember a captain in the Twenty-second Illinois who scorned the ordinary methods of punishing the privates of his company. While we were at Bird's Point, Mo., in the fall of 1861, I passed his quarters one day and found him behind his tent pounding a man as large and as well-to-do as himself. The captain was stripped to shirt and trousers and was fighting for the mastery. "For five or ten minutes it was give and take between him and his antagonist. Then the latter was knocked down and said he had enough. Then the captain put on his coat, sent the man to the orderly's tent, and sat down to smoke with me. He said he made it a rule to trounce every man who was saucy or insubordinate, and as his men were mostly from the country, and given to independence of notions, he found the plan to work well. He said he would no more think of bucking and gagging his men than he would of shooting him."—Chicago Inter Ocean.

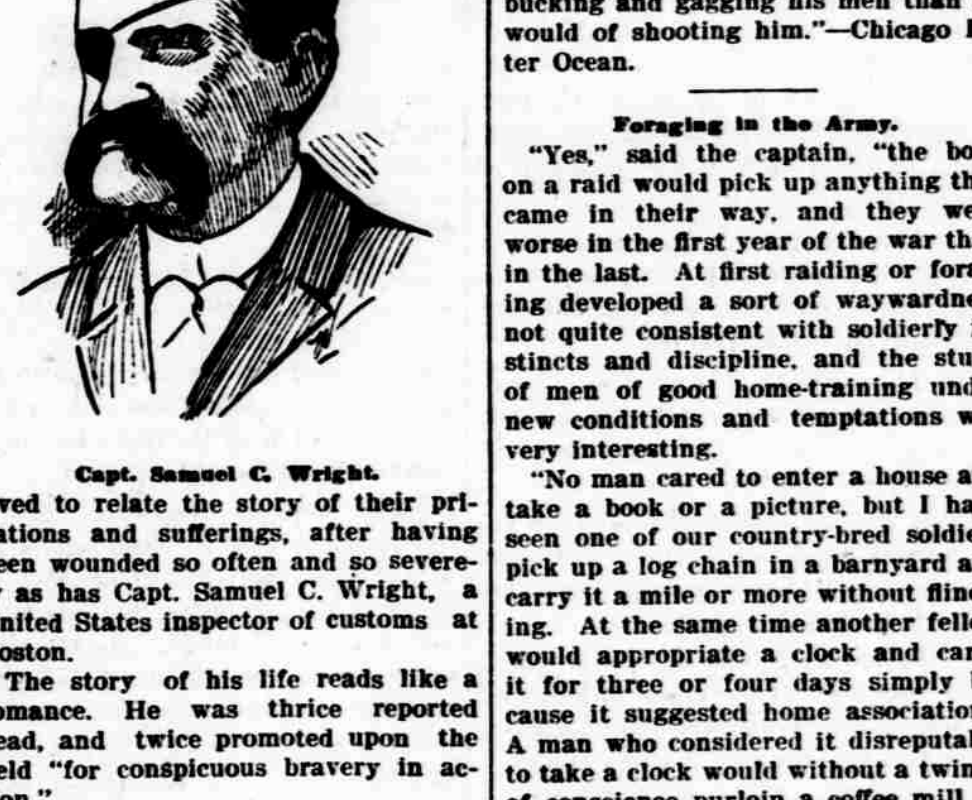
Bathrooms at Poultry Raising. All of the world's most successful men succeeded because of the enthusiasm that they had in their particular line of work. It is unnecessary, then, to say that a man to succeed in poultry raising must have enthusiasm. A man who has a big poultry establishment finds his enthusiasm waning or being diverted to some other occupation it will probably be found the part of wisdom to drop the poultry business. A writer visited a poultry establishment where the owner had evidently had his enthusiasm for the poultry business diverted into another channel. He had another business, and that appeared to be thriving. When the writer visited the poultry establishment where the owner had evidently had his enthusiasm for the poultry business diverted into another channel. He had another business, and that appeared to be thriving. When the writer visited the poultry establishment where the owner had evidently had his enthusiasm for the poultry business diverted into another channel. He had another business, and that appeared to be thriving.

Two Types of Dairy Cows. Prof. T. I. Haacker: We feed each cow all she can consume and assimilate. At the end of the first year we found that some cows charged us 7 cents per pound, while others charged only 2 cents, and others ranged between these two sums. The breed made no difference; some Shorthorns made cheap butter, and some Jerseys costly butter. Breed had nothing to do with the cost, it was all in the cow. Size or color had nothing to do with it. We put all the cows that made cheap butter on one side, and ranged the cows who charged the most for their milk on the other side. Each side, no matter what breed, showed similar characteristics. Those that charged a high price were sleek, nice looking animals that would answer the description of the general purpose cow, while those that charged cheap had a defective dairy type, the light quarters and the heavy wedged shaped barrel. Every pound of food consumed was put to good use.

Table with 3 columns: Feed, Protein, Carbohydrates. Includes items like Green Fodder, Corn silage, Rye fodder, etc.

Plants for the Children. Each one of our experiment stations adds its quota to the list of plants for a recent public document, the station at Mesilla Park, New Mexico, states that it is anxious to do all in its power to aid in the work of beautifying the surroundings of the rural schools of New Mexico. To this end it has already sent out stock for such purposes as the raising of corn, wheat, and other crops. It is also anxious to have a small supply of such trees, shrubs, and plants as it has available to the authorities or teachers of rural schools of New Mexico who apply for the same. It has already sent out stock for such purposes as the raising of corn, wheat, and other crops. It is also anxious to have a small supply of such trees, shrubs, and plants as it has available to the authorities or teachers of rural schools of New Mexico who apply for the same.

Grant and Lee at Appomattox. As the two sat talking on their horses only a few steps from us, we had a full opportunity not only to note their bearing, but to hear most of the conversation. I had not seen Lee for about six years, and his appearance is thus described in a letter written the next day: "Soon after our arrival Gen. Lee came riding up, attended only by two aides. He looked pretty much the same as usual, but older, and his face has a very sad expression. I did not see his smile once during the interview. He has the same quiet, subdued, gentlemanly manner for which he was always noted. He was dressed in a dark suit, and he wore a black hat. As the two generals sat talking together, Gen. Grant turned and beckoned to Gen. Seth Williams, his adjutant general, who rode forward. I was curious to see a meeting between Lee and Williams. Some years before the war, when Lee was superintendent of the military academy, Williams was his adjutant, and was known to be a great favorite with him. As Williams approached, the two shook hands, but there was nothing in Lee's face, as he gravely and courteously received him, to indicate that he had ever met him before. After talking a little while Gen. Grant beckoned me forward, and on approaching Gen. Lee pretty much the same scene took place as with Williams. Gen Grant said: "Gen. Lee is desirous that his officers and men should have on their person some evidence that they are paroled prisoners, so that they will not be disturbed." Gen. Lee remarked that he simply desired to do whatever was in his power to protect his men from any further disagreeable. I said I thought that could be arranged, as I had a small number of medals which could be blank forms struck off which could be filled up and one given to each officer and man of the army, signed by their own officers, and distributed as required. To this he assented. He then turned to Gen. Grant and said: "General, have you accepted private horses for the surrender. Now, most of my couriers and many of the artillery and cavalry own their own horses. How will it be about them?" Gen. Grant replied at once, speak-



Capt. Samuel C. Wright.

Capt. Samuel C. Wright. lived to relate the story of their privations and sufferings, after having been wounded so often and so severely as has Capt. Samuel C. Wright, a United States Inspector of Customs at Boston. The story of his life reads like a romance. He was thrice reported dead, and twice promoted upon the field "for conspicuous bravery in action." His right eye was shot out, and the ball entered his left head, but he lived to tell the story, and shows the bullet dangling from his watch chain.

Phili Sheridan's Brother. Brig. Gen. Michael V. Sheridan resembles his brother Philip of Winchester fame in general appearance, although he is taller than "Little Phil." In speaking of Sheridan's resemblance to his brother a friend of Gen. Brooke tells this story: I was at Omaha one day while Brooke was in command of the Department of the Platte, and was invited to the general's home for the evening. There I met a number of men and women. The presentations were of the regulation order, and left no deep impression as to names on my mind. After speaking to a stocky man, who even in his evening clothes looked like a soldier, I said to one of the women, "How much your friend looks like Gen. Sheridan." "That is not strange," said she, "for they are related on their parents' side." "I don't quite understand," I said. "Why, he's 'Phili' Sheridan's brother," was the reply.

Mystery of the Dow. After a clear, still night, every grassblade hangs thick with dewdrops, while the roads and gravel paths are suddenly startled by a total eclipse of the sun for which the troops were not prepared. To prevent the possibility of another such surprise, which might have had grave consequences, the British war office decided to have an almanac regularly produced for the army's guidance. Such an almanac has been published regularly since that time. For various reasons the best historical novel is the one that remains unpublished.

"On every soldier's grave with love to lay a lily there." —James Whitcomb Riley. "Did I take it? Well, I delivered the best speech ever made in the Rockies. But you should have seen that procession. Miners wearing their red or blue shirts, with great leather belts to hold their trousers in place, sans coat and vest, but shod in high-top boots and on their heads were slouch hats or sombreros adorned with rattlers. Here and there was a limp veteran, whose empty sleeve a limp demonstrated that he had helped defend the stars and stripes. Altogether there were fewer than 300 men in line. But patriotism, pure and unadulterated, beat in every breast. I was accorded a position of honor at the head of the line alongside my friend, who was past commander of the post and measured about 5 foot 4. The commander was 6-foot 2, and we made up a great bunch. The line of march took in the main street of the town and then over two miles of rocky road to the cemetery. Once there I delivered my little talk and then the veterans tenderly placed flags and flowers on the graves of their beloved dead. Many a teardrop fell upon the blossoms as the old boys passed them around and recalled their gallant comrades of years ago. There was no work in Georgetown that day, for it was a holiday devoted to the memory of the brave men who fought to preserve the nation's honor. Give me the frontier for the real article in patriotism."

Let No Soldier Be Forgotten. The significance of the day should inspire every veteran soldier and sailor to pay homage to the valorous deeds of their comrades of 1838. The annals of our country have been made glorious by the noble and heroic sacrifices of her sons. It is our duty to keep ever present in our memories the historic deeds of the patriotic dead—our country's dead.

The First Volunteer. Dr. Charles F. Rand is Still Living at Washington. At this time the living as well as the dead are being remembered by the war claimer's attention. It is interesting to note that the first volunteer for the civil war is still living. He is Dr. Charles F. Rand of Washington, who has been mentioned in the columns of this paper as the first volunteer. He is now 80 years of age and has been a resident of Washington for many years. He was a member of the first volunteer company and served in the army for several years. He is now a private citizen and is well known in the city. He is a man of high character and has been a public servant for many years. He is a member of the Washington Historical Society and has been active in its work. He is a man of high character and has been a public servant for many years. He is a member of the Washington Historical Society and has been active in its work.

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Wisconsin—Cold, dry weather has been unfavorable to meadows and pasture, which are in poor condition not so much on account of severe winter weather as late pasturing in the fall, which left the roots exposed. Clover winter killed badly.

Virginia—The condition of spring grasses over the state is hardly so good as the growth of grass having been scanty in most localities.

Germany has imported as much as \$10,000,000 worth of apples in one year and \$2,500,000 worth of pears.

The man with that particular brand of trouble now might well have fewer cows coming on.

Every farmer should make a study of seeds as to vitality. With many there is a sort of fatalism as to the germinating quality of their seeds. They take it for granted they will grow.

One can stop in rising, never in declining.