

FARM AND GARDEN

SORE HEAD IN POULTRY.

Most Common Among Young Chickens—Effective Treatment.
By C. A. CARY, veterinarian, Alabama experiment station.

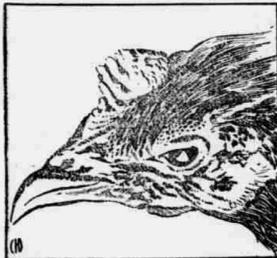
Chicken pox sore head, or contagious epitheloma, in poultry is a common disease. It is more prevalent among young chickens, from broilers to maturity, yet younger and older chickens



HEAD OF A CHICKEN AFTER RECOVERY. (This was a bad case of sore head. The bare places on the skin around the eye give some idea of the extent of the crusts. This case was treated with creolin and vaseline.)

may have this disease. There are no positive differences between the various forms of diphtheria, roup and chicken pox, or "sore head," other than the location in which the lesions occur.

I have found nothing better or more effective than iodoforn by itself, or iodoforn one part and tannic acid one part, or iodoforn one part, boric acid one part and tannic acid one part. It is best to wash the head, wipe out the mouth and throat with a weak solution of creolin (one or two to 100), using a boiled cotton or medicated absorbent cotton swab. Next remove the crust on the skin, comb, wattles and eyelids and the exudate from the eyes, the mouth and throat. Then, with sterilized or boiled or absorbent cotton, wipe away the blood on the raw surfaces until they cease to bleed, then with cotton swab cover the raw places with iodoforn or either of the iodoforn powders above mentioned. Do not be afraid to put iodoforn into the eye or the conjunctival sack. The next day or the same day a few hours later apply freely vaseline or fresh lard all over these places. In some cases it may be necessary to apply the iodoforn or iodo-



CASE OF SORE HEAD. (Showing crusts on comb, eyelids and skin.)

form powders once a day for two or three days, and thereafter apply freely only lard or vaseline every day. In other cases one application of the iodoforn and daily applications of lard and vaseline are all that is required. In bad cases, especially where they do not improve as rapidly as they should, give internally as much as a teaspoonful of vaseline containing a few drops of creosote or ten to thirty grains of epsom salts in a tablespoonful of water. This may be given once per day or once every other day. It usually prevents intestinal infection or complications.

In cases where roup predominates or where the suborbital sinus becomes filled with pus and the eye is greatly distended there are several lines of treatment that may be followed. In the early stages apply sweet oil or olive oil to the nostrils and if possible inject some of this oil into the nasal passages by using a small nozzle and syringe. After injecting or applying the oil apply pressure over the distended parts, and thus expel as much of the pus as possible. This may be repeated twice per day.

Hard Mouthed Horses.
Here is something of practical value to any one driving a horse that pulls on the bit: Fasten a small ring to each side of the bridle and as near the brow band as possible. Pass the lines through the bit rings and snap them into the rings at the brow band. This, with a common jointed bit, will enable a child to hold a puller or hard mouthed horse with ease under almost all circumstances. It can be used on a fast horse in double team or on both, as desired. It is cheap and easily applied, and it won't make the mouth sore. It is better than any patent bit.
—Farm Press.

Vitality of Alfalfa Seed.
Tests made at the Colorado station seem to indicate that "good, plump, mature, clean alfalfa seed does not lose its vitality rapidly when kept with ordinary precaution to prevent injury from moisture." The oldest sample had a germinating power of 93 per cent when six years old, of 72 when ten years old and of 63 when sixteen years old. Professor W. P. Headen believes that the limit for the vitality of good, mature alfalfa seed exceeds sixteen years.

CORN TALK.

A Study of Important Points in the Judging of Corn.

There appear to be some vital points both as to desirable qualities and defects in picking out a good ear of corn. Professor V. M. Shoemith of the state college has prepared for the Kansas boys who engage in corn contests a little study of corn which furnishes an elementary guide in corn judging and includes among its twenty-seven practical questions and answers the ones here reproduced:

First.—Why should corn be studied as to trueness to type or breed?

So that a better idea may be had as to the certainty with which the characters will be transmitted. Corn possessed of desirable characters, but little breed type, is of little value, since these characters may be substituted the following season by latent or hidden characters of little value. Hardness, productiveness and other invisible characters may be as distinctive breed characteristics as the color, shape of ears, etc., and these must be judged by the type as seen in the visible characters.

Second.—How may the trueness to type best be judged?

By studying the uniformity of the ears in shape, size, straightness of the rows, color, etc., and also by studying the uniformity of the kernels in size, shape, color and indentation. The uniformity of ears is studied by comparing with the "standard of perfection," but as it is difficult to sufficiently define the standard of perfection for the kernels a heading "Uniformity of Kernels" is placed on the score card.

Third.—Why should an ear of corn be cylindrical or nearly so?

Because this is the only shape which will permit of the same number of rows throughout the length of the ear and also the same size and shape of kernels in all parts of the ear. In a tapering ear there must be some short rows or the kernels must be larger or have more space between them at butt than at tip of ear. In such an ear or one of irregular shape some of the kernels must be of irregular size or shape, which will not permit of an even distribution by the planter.

Fourth.—What is the proper ratio between the length and the circumference of an ear of corn?

Although there is not much experimental data to show that an ear of corn should be of exact proportions, most corn breeders agree that the ratio between length and circumference should be about as 10 is to 7. It appears that ears which are long and slender are often associated with plants which are not possessed of the greatest vigor and hardiness, and also such ears have a relatively small percentage of grain, while ears which are large in circumference and short are usually late in maturing and also often have a small per cent of grain because of an extremely large cob.

The Irish Cobbler.

While not a recent introduction, having been grown for many years in Connecticut and Long Island, the Irish Cobbler potato has only lately attracted the general attention of eastern growers as a profitable early market variety. It is not of first quality—inferior even to Early Ohio—but is such a fine grower and reliable cropper under ordinary trucking conditions that it has literally forced itself on the attention of market gardeners. Its origin appears to be something of a mystery. Seedsmen and dealers disclaim knowledge as to when or where it first got into cultivation, but have generally been compelled to catalogue it. Seed stock has not always been easy to obtain, but will be freely offered the coming year. The plant is strong and upright in growth, with thick and healthy dark green foliage. The potatoes in good soil run from medium to large, oblong in shape, with thin white skin and rather prominent eyes. They grow rapidly and usually reach marketable size within a week of Early Ohio planted at the same time, but far outyield that formerly popular kind. The table quality of the young tubers is very tolerable, but falls off as maturity is reached. Notwithstanding its rather unsatisfactory cooking quality Irish Cobbler has turned out so profitable that it is displacing other early kinds in many localities.—Rural New Yorker.

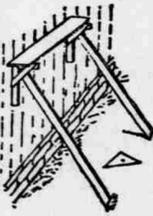
Pure Water in the Dairy.

A good illustration of the need of pure water in the dairy is afforded by experiments at the Iowa station on the quality of butter washed with pasteurized and unpasteurized water. In every case the butter washed with the sterile water kept better than the other.

Adjustable Scaffold.

The drawing illustrates a good adjustable scaffold for painting and is described by a contributor in New England Homestead. It consists of two brackets of 2 by 4 scantling supported by long 2 by 6 props, the brackets in turn bearing the scaffold board. The construction is simple. Let the lower arm of the brackets be longer than the horizontal one. There is one brace on each side of the bracket, and the long 2 by 6 prop goes between them. The upper end of the prop is round, and the lower is cut at an acute angle.

The scaffold may be raised or lowered by pushing in or drawing out the feet of the props. As the props are not fastened to the brackets, several pairs of different lengths may be used for high or low painting. Those in the drawing are rather short.



A Successful Rival

(Original.)

It is not unusual for either a man or a woman to come between an engaged couple, but it is unusual for the course of true love to be turned away by a horse. The story begins back in the days when the Indians in the west were constantly breaking away from their reservations and slaughtering all palefaces who came in their way. It was then that Florence Brooks was visiting an older sister at Fort R., the wife of an officer in the United States army. And then it was that, the garrison having marched away, leaving the women and children to the protection of half a company under the command of a lieutenant, another tribe consisting of several hundred warriors came down to take possession of the fort.

When a friendly redskin rode into the inclosure and announced the coming of his fellows, every man being needed for defense, Florence Brooks volunteered to ride to the nearest post, fifty miles distant, for succor. Lieutenant Howard Whiting, in command, placed her on his own Kentucky bred horse, Comanche, and sent her flying out of the fort, shouting after her, "Their lives depend upon you!" How the horse enabled her to cross the path of the coming Indians an hour before they reached the point of intersection, how ten miles farther on she met a squadron of cavalry, how when the Indians reached the fort they found a force ample to protect it, need only be referred to here. From that day Comanche was beloved by the whole garrison, and especially by Miss Brooks. As for Miss Brooks, she was beloved by the whole garrison, especially Lieutenant Whiting.

And now the view of alkali plains surrounding Fort R. has changed to vacant lots on the outskirts of a city. Miss Brooks rides in a trolley car instead of on horseback, and Lieutenant Whiting spends the greater part of the day in a recruiting office in one of the dingiest streets of the city. But early in the afternoon he leaves his sergeant in charge and, mounted on Comanche, rides past Miss Brooks' abode. She is watching for him from an upper window. He raises his hat, and from behind the curtain she throws him a kiss. But for one thing the lover would be supremely happy. He is jealous of Comanche.

"Why," he asked on joining his fiancée after one of his rides, "do you always feast your eyes on my horse and pay no attention to me? This afternoon when I rode by you didn't even see when I raised my hat. You waved your hand long after I had done so."

"I love Comanche," she replied. "Miss Brooks left the city for a month, and when she returned her lover informed her that he had sold Comanche. The reason he gave for doing so was that he had been ordered to rejoin his regiment in the west, and Comanche having become old, besides gone lame, the lieutenant would not feel warranted in transporting him so far, especially as he would need a serviceable animal. Miss Brooks looked astonished when the news was imparted to her and argued long and well against the necessity for the sale. But Whiting had nothing but his pay, which was not sufficient to keep so expensive a pet, and she was obliged to admit, which she did reluctantly, that he could hardly have done otherwise. They parted with an embrace, warm enough on the part of the man, but not the girl.

However, it gradually came over Miss Brooks—planning as she was for the coming wedding—that Comanche could not have been included in the calculations. Indeed, it was very difficult for her to figure out the problem of living on Whiting's pay, even without what Comanche would have cost. She had an income of \$800, which she must relinquish upon her marriage. This left only a second lieutenant's pay, with commutation for fuel and quarters, on which the couple must live. After all, Whiting was right.

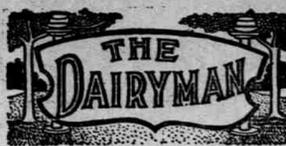
There is no doubt that all would have gone well had it not been for a certain inopportune meeting. One morning while Miss Brooks was out buying her trousseau she saw a man driving a cart with an enormous load on it. The horse was unable to get it up an incline, and the driver was belaboring him unmercifully. Miss Brooks, naturally fond of horses, approached to protest. The horse turned his head, looked at her out of a pair of melancholy eyes and whinnied. He was Comanche.

Miss Brooks embraced him and wept. The next mail carried to Lieutenant Whiting a breaking of the engagement from Miss Brooks. No satisfactory reason was given. The real reason was that she loved Comanche better than Whiting. On her income, which, if not married, she would retain till death, she could live and take care of Comanche. She bought him for \$50 and kept him in royal equine style.

Comanche lived five years after being rescued from the melancholy position into which his master had sold him. Then Miss Brooks, after a decent period of widowhood, began to think of her lover of other days. He, hearing that his rival was dead, sought her. They were married and went to live at the post where he was stationed. "Whiting," said his colonel banteringly one day, "I hear your wife kept you waiting five years while she lavished her affections on a horse. I didn't know I had an officer under my command with so little capacity for pleasing the fair sex."

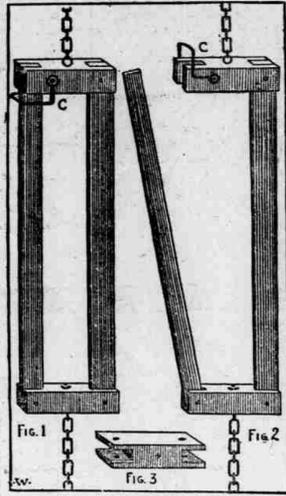
"Colonel," replied Whiting, "I would much rather have been kept waiting for the woman I love by a horse than by some men I have known."

ELLSWORTH EMERSON.



A writer in Farm and Fireside says the cow stanchion shown in the illustration has been used in his stables with much satisfaction. We have used both chains and the old stationary stanchions and have seen some of the modern patented cattle ties, but consider this stanchion superior to any of them, he says. With this stanchion the cows are given sufficient freedom without undue liberty. They can turn around to lick themselves, yet cannot get back on the walk or ahead in the manger.

Fig. 1 shows the stanchion closed. Fig. 2 shows it open. The two sides are made of hard wood, four feet long, one and one-fourth inches thick and



A GOOD COW STANCHION.

two and one-half inches wide. The end pieces are also of hard wood and are one foot long by three and one-half inches square and are mortised to receive the sides, as shown in Fig. 3. The sides are fastened to the ends with bolts, one side on bolt at X and being held when closed by clevis, C. Eyebolts are affixed at each end, to which short chains are fastened and by which the stanchion is suspended.

The whole stanchion, including bolts, labor, etc., should not cost more than 60 or 75 cents and may be made for even less than that amount.

Parentage Valuable.

Cows, like men, are good or bad oftentimes because of their environment, bringing up and education. We look for and expect men to be good if brought up in good, religious families and communities. I have often heard it said, "Give me the first six years of a child's life, and I will tell you with a great deal of certainty what the future of that child's life will be." So I believe that the conditions under which an animal is reared determine in a large measure her future usefulness or uselessness, says a writer in Kimball's Dairy Farmer. As with men, the parentage is of great value, and we look for and have good reason to expect cows to be better cows from a long line of productive ancestry. This, then, is the stepping stone in the developing of a dairy cow.

The Good Bull.

Authorities say that "daughters take after their fathers and sons after their mothers" in predominant characteristics. This is true of all animal life. If a bull's lineage can be traced through a line of remarkable milkers his value will be enhanced. He will transmit the qualities of his dam to his offspring. It often happens that the farmer who buys cows with the idea of raising heifers is disappointed. He is impatient. He cannot wait for the second generation. He thinks his cows are unprofitable because their heifers are not as good as he had hoped they would be. It usually takes at least two generations to get a herd into good working condition. You can't do it in a minute. Don't get hasty, but keep the facts in mind and work toward a definite purpose. Above all, use a good sire. You need good cows. That is plain. And you need a good sire to get good cows. That isn't plain as it ought to be. By a good bull we mean one whose maternal blood stands for milking qualities and performance.

Care of the Dairy Calf.

The young calf should be taken away from the mother after it is three or four days old. It should be fed pure milk for a time, the temperature being about 98 degrees F. Care should be taken not to feed the calf too heavily, or it may get the scours. The calf should be taught to drink from a pail at the outset. This can be done by putting the finger in its mouth and gradually lowering the hand until it is beneath the warm milk in the pail. In a short time it will drink by itself. After being fed on the pure milk for a week or so the calf may be fed on skimmed milk. If the calf does not run on pasture, it will be profitable to put a little meal or shipstuf in the skimmed milk. After a month or two it should be fed some good timothy or clover hay.

Use the Tester.

A good cow is known by her performances at the milk pail. If she doesn't do her duty by that, she is not a good cow and should be converted into beef. Use a pair of scales and a tester and know what your cows are doing.

PARAFFINING OF CHEESE.

It May Be Done on the Farm at Little Expense.

Nearly all factory cheese is now paraffined, and the advantages obtained by covering the cheese with a thin layer of paraffin are:

The loss in weight during curing is much less than without the paraffin, and the cheese will stand a higher temperature in the curing room without damage.

Mold is entirely prevented or at least greatly checked.

Flies cannot deposit their eggs through the paraffin, and that prevents skippers.

The paraffining of factory cheese is done by dipping it in melted paraffin, so that a thin layer adheres to the cheese, but of course it takes quite a large kettle full to dip even a ten pound cheese, and this method would on that account be somewhat expensive for cheesemakers on the farm. The paraffining can, however, be done at practically no expense and with very little work by the following method:

Melt a pound or two of paraffin (costing about 15 cents per pound) in a kettle until it is quite hot and begins to smoke and then cover the surface of the cheese, using a fairly stiff brush, say about an inch in diameter, and rub it in good. Be sure to keep the paraffin hot and dip the brush frequently. Do not try to cover too much surface with one dipping of the brush. The coating should be about half the thickness of a dime and adhere well to the cheese. It takes less than 1 cent's worth of paraffin for a ten pound cheese.

The cheese should preferably be from three to ten days old when paraffined, and the surface must be wiped dry. It is best to leave the cheese in a warm room for some hours before paraffining; otherwise it is difficult to get a coating that will stick. As the farmer generally has no regular curing room, says a writer in Hoard's Dairyman, it will pay him well to take the little extra trouble in paraffining all his cheese.

Homemade Butter Worker.

A very effective butter worker, which will save a great deal of labor, can be made by any man at all handy with tools out of some strips of hard wood, maple preferred. Fashion the pieces into a wide, shallow trough, tapering at one end to about four inches. Set this trough on three legs, two under the wide end and one under the narrow end, strengthened by an extra piece underneath to fit them into.

Make a roller out of a piece of the wood four inches square and one foot longer than the trough or body of worker. A very good length for a medium sized dairy would be thirty inches for the body part and four inches for the roller. Cut with a fine tooth saw one inch deep on each side of the stick at a point twelve inches from one end. This extra twelve inches is for a handle and should be dressed down round and smooth to about two inches, so that it is easy to grasp by the operator. The remaining three feet must be made tapering, the small end (that opposite the handle) being not more than an inch in diameter. Dress the wood square, then cut off the four corners to make it octagon in shape.

In the narrow end of the trough drive an ordinary iron staple and in the small end of the roller a short, heavy cut iron nail—not a wire nail, which would be likely to bend. The nail should project about an inch. This fits into the staple, holding the roller in place, and completes about as effective a butter worker as any one need ask for.

Dairy Talk of Today

The best cows do not always have the largest udders. Often udders are deceptive. Scales and the Babcock test is the surest way to determine your most profitable cows.

Test Associations.

It is important to know the yearly yield of every cow in the herd and whether she is paying or not if the best results are wished for. To this end test associations are being formed in some parts of the country to work out the problem of herd improvement.

Just Before Milking.

There are two very practical methods of reducing the amount of hair, dust and filth that ordinarily falls into the milk. By giving the flanks of the animal and the udder a good washing and then wiping dry just before milking; or, other, and probably the most satisfactory method, is to wipe the udder and adjacent parts with a damp cloth.

Stable Bacteria.

At Cornell Agricultural college some of the trained scientific men engaged there undertook the study of stable bacteria and how fast they will multiply. A hair from a cow's flank was put into 500 cubic centimeters of sterilized milk. After shaking it for a minute there were fifty-two bacteria per cubic centimeter; after twenty-four hours it contained 55,000 per cubic centimeter. A cubic centimeter of milk is a very small quantity, only a few drops, and is expressed in abbreviation by the letters C. C. Another experiment was made in which a piece of hay taken from the stable floor about two inches long was placed in 500 cubic centimeters of sterilized milk. The milk was shaken one minute and then contained 3,025; after twenty-four hours it contained 3,412,000 bacteria per cubic centimeter. Now, it is these bacteria of the destructive kind, says Hoard's Dairyman, that destroy the quality in milk, cream, butter and cheese.

Additional Local.

Lost, between Lobster and Insane, a large Holstein Jersey cow, one year injured, Reuben Norwood, 2

The room adjoining the Moses store on the north is being thoroughly overhauled and improved, and when completed it is to be occupied by the Bell telephone company.

Master Darrell Wigle of Portland is spending the holidays with his grandparents Mr. and Mrs. S. N. Wilkins in this city.

The Presbyterians held their Christmas exercises Monday night. There was a tree, a program which was in the nature of a cantata, and a good time for all present.

Mr. and Mrs. Meers of Portland have been guests this week of the latter's parents Mr. and Mrs. R. N. White, in this city.

Frank White has returned from a brief trip through Eastern Oregon.

Prof. and Mrs. George Paul arrived from Portland Monday for a visit with relatives. Prof. Paul is still with the Western Academy of Music as head of the department of dramatic and is doing well. He returned to Portland yesterday but Mrs. Paul will remain for two weeks.

The Foreign Missionary Society of the M. E. church is to hold its annual tea in the church basement New Year's eve. A very interesting program will be given and refreshments will be served for a trifling sum. The public is invited.

The performance of "King Richard the Third" at the opera house New Year's night will begin promptly at 8 o'clock, and closes at 10:30. This will give those who wish to go ample time to attend the Masonic banquet, after the theatre.

John H. Stowe and Miss Carrie E. May, both of Alesca, were married at the home of Rev. and Mrs. C. T. Hurd at nine o'clock Christmas morning. Only the necessary witnesses were present. After the ceremony the young people went to Albany on a brief visit. They will reside in Alesca, where they are both well and favorably known.

Harold Wilkins left yesterday for a holiday visit in Portland and Oregon City.

United Evangelical church. Regular services Sunday. Morning subject, "The Golden Wedge;" evening subject, "A Good Guide."

Mr. and Mrs. Brady Burnett arrived Wednesday evening from Canyonville where they were married Christmas day. The bride was formerly Miss Susie Hopkins. Mr. and Mrs. Burnett will reside with the groom's mother in this city. Brady is too well known in Corvallis to need praise from the Gazette, and congratulations are extended by a wide circle of friends.

A special series of evangelistic meetings will be held at the United Evangelical church beginning Monday eve, Dec. 31st. Rev. A. A. Winter, of Portland, will be here on Jan. 8th to assist.

The Christmas exercises at the First Methodist church Monday night were well attended, the basement being crowded with friends, parents and children, all eager to see and hear. Songs, recitations and exercises by the children made up a very interesting program, and two attractive trees delighted the little folks. The room was prettily decorated with cedar and the occasion was very pleasant for all.

The Old Year.

Slowly the Old Year dies—Hard pressed.

Time was when it was your
Full of vigor...the Spring of life
Bounding to meet the summer.

But now, old, forsaken—
Summer and autumn vanished,
Lodged in storms and darkness—
The Old Year dies.

Pity those who live by years—
They die daily.

Rejoice in life!
Eternity is not measured by time,

But since thou must measure thy expression,
Be wise—and do not bury thyself in it—
Express the Life.

—Contributed.

"Scaly Leg" is Contagious.

Scaly leg is a form of scabies or mange, caused by the mite known as the Sarcptes mutans. It is a contagious disease, but does not spread very rapidly, and there may be only a few affected birds in a flock at one time. When the disease is first observed prompt and energetic measures should be adopted to eradicate it. The affected birds should be isolated to prevent the spread of the contagion. Begin treatment by soaking the legs in warm water to which soap has been added until the scales have become thoroughly softened, and the loose scales can be removed without causing bleeding. After this has been done apply a good coat of carbolic ointment or balsam of Peru. This should be repeated daily for three or four days.