NDED 1806

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out on a coat everything hing looks! he eggs will

TRIX.

Feeding Young Chicks.

When a child on the farm, it was my duty to mix alarge pan full of corn meal into a dough with cold water and feed the chickens. We raised a great water and reed the chickens. We raised a great many chicks on that food, with the addition of what they picked up in a free range of the farm.

Now I never fed raw corn meal. I think it is

much better for them when it is baked into a bread that crumbles easily. To make the bread, mix with buttermilk, using twice as much soda as one would if baking for the table. The bread will be rather if baking for the taute. The bread will be rather vellow if the double portion of soda is used, but this does not matter. For a change, an occasional feed may be baked very hard and soaked in skim milk. The skim milk given them to drink is also There is nothing better than table scraps for the chickens, young or old, but in these days we have learned to use the "left overs" in so many ways that the scraps from the table would suffice for a very small flock.

Very small chicks will learn to eat wheat, and it is excellent to alternate with the corn bread. If they have a free range they will pick up all the green food they need; if they are confined in small lets compathing of the kind must be found in a lots something of the kind must be furnished them. I find that they will eat chopped radish tops greedily. Last spring the alluring catalogue description of a mammoth radish induced me to try it. The tops proved to be mammoth indeed, but the roots were about the size of one's little finger. However, they made such an abundance of green food for my poultry that I thought them worth the room they had in the garden and the cultivation that had been

given them. Feed but little at a time and feed often is a good rule to follow, especially for the first six weeks of the chick's life. Five times daily is not too often, if they are kept in an enclosure. After the weather becomes warm a hen who may roam where she will on a farm will almost raise her brood without regular feeding.

VETERINARY.

## Milk Fever Treatment.

To the Editor FARMER'S ADVOCATE:

DEAR SIR,-In the April number of the FARM-RR'S ADVOCATE I notice an article on the prevention of milk fever, by Mr. Hilgert. It is not my purpose to critisize the treatment as given, but rather to suggest improvements. My practice for the past nine years has been largely a mixed one, and I have had considerable experience with milk fever. Mr. Hilgert's plan of preventive treatment is very good, and goes far towards lessening the number of cases, but I wish to add a few suggestions to his treatment after the case has developed. He advises the use of nux vomica in grain doses. Now, in order to get any effect from this drug, even in a healthy animal, would require at least 30 or 40 grains, and a cow suffering from milk fever will take dram doses -viz., 60 grains—every two hours for 24 or 36 hours without any ill effect. It is almost incredible, in fact to what an extent this drug may be pushed in some cases. The effect of nux vomica is a nerve stimulant, and an animal in the comatose condition of milk fever will take very large doses without showing any marked action from them. During the progress of the disease the natural functions of different organs and glands are greatly inpuired, and consequently absorption of medicines in the stomach is lessened. For this reason the administration of too many or too much treatment is to be avoided. I would, therefore, suggest that the hot tea, molasses and raw oil and turpentine, as recommended by Mr. Hilgert, be dispensed with. It is advisable to give a good purgative as soon as the animal is seen to be effected. For this purpose the one mentioned by Mr. Hilgert cannot be the one mentioned by Mr. Hilgert cannot be improved upon, viz, salts, jalap and ginger, with water. By giving nux vomica in dram doses with alcohol or whiskey, as further suggested by Mr. H, and carefully following his other lines of treatment, the owner is doing all that any non-professional man can do, and with fair chances of success. Trusting that Mr. Hilgert will not take offence at what I have written, and thanking you for your valuable space. I am. Yours truly, HERBERT S. PERLEY, V. S. valuable space, I am,

Govt. Vet. Inspector. Ottawa, Ont. Probably the greatest weakness in the treatment of milk fever cases by mouth is the inability of the cows to swallow soon after a severe attack sets in. Medicine given under these conditions is liable to find its way into the bronchial tubes and the lungs and suffocate the animal. Even if the medicines were gotten past the lungs into the stomach, the action of that organ is so dormant that after a certain stage the patient receives no benefit from it, but dies as though nothing had been done for her. The newest treatment for milk fever—parturient apoplexy—and one which is meeting with marked success when given due trial is the Sahmidt treatment, which consists trial, is the Schmidt treatment, which consists principally of injecting into the udder, through the teats, potassium iodide. It has been given a thorough trial by J. H. Tennent, V. S., of London, Ont., who reports his cases treated in 1890 in the Journal of Veterinary Archives. Below is the Doctor's introductory remarks, three sample cases

out of fifteen treated, and his conclusions: The same instructions as to care and the same antiseptic precautions were used in each and every case unless otherwise specified.

"Schmidt'streatment and our mode of applying it are as follows: Procure a clean vessel (a quart fruit sealer will do, and we prefer something of this kind, as it can be kept closed until the udder is prepared to receive it). Put into the vessel a quart of boiling water, and when cooled to a temperature of 100° to 101° F., add formalin, 1 dram, and potassium iodide, 2 drams; shake gently and it is ready for use.

"Remove all the milk possible from the udder, then wash the udder and teats with an antiseptic wash; also the instrument, which consists of an ordinary bulb enema syringe (human), to which is attached a teat siphon—a jeweller brazing a shoulder on to a siphon so as to fit the end of the shoulder on to a siphon so as to fit the end of the syringe. The siphon is passed up the milk duct to the teat, and eight ounces of the solution of potassium iodide-formalin and water is injected into each quarter of the udder. In emptying the contents of the syringe into the gland, air is admitted. I have seen no bad results, but would not advise too much air to be forced in, as it might be the means of infection of other germs.

"If the patient is down and unable to rise, a clean cloth should be placed under the udder to

keep it out of the stable litter. "Care.-Place the animal in a position on the sternum, and endeavor to keep her so by bundles of straw, etc.; clothe the body according to the season; turn her from side to side every five or six hours. The udder is to be hand-rubbed or kneaded every hour, so as to ensure distribution throughout the entire gland. The solution is not to be milked out of the udder before eight or ten hours, when a second injection may be given if required.

"Remove feces from the rectum. If urine is retained over twelve hours use the catheter. And in no case must medicines be administered by the mouth until the patient is well able to swallow. We give no medicine by the mouth unless the patient is able to stand. Cold water may be given ntities frequently if the patient will during convalescence consists of something light, nourishing, and easily digested. If constipation is present two or three days after the commencement of an attack an ordinary physic drench may be given.

"The other medicinal treatment will be given with each case.

"Case I.-February 28th, 1899. Saw cow at 9.30 p. m. Down, unable to rise. Eyes amaurotic and all other symptoms well marked; pulse 96 and strong; temperature 101° F. Calved thirty-six hours previous. Extracted six quarts of blood from the jugular with difficulty. Gave aloes barb. one ounce, sod. chlor. one-half pound., spts. eth. nit. two ounces, water one quart. Injected udder.

nit. two ounces, water one quart. Injected udder. Left eth. nit. to be given in two-ounce doses every five hours. Usual directions as to care, etc.

"March 1st, 10 a.m.—Still down; symptoms much better; bowels moving freely; urine high colored; pulse 98 and weaker; temperature 100° F. Two quarts from udder. Respirations normal. Injected udder. Left ath nit two owners to be given as udder. Left eth. nit., two ounces, to be given as before, and same care, etc. 8 p. m.—Had been up twice during the afternoon; had eaten a little and drank some water; found her ruminating slowly. Pulse very fast and weak. Temperature 102° F. Partial sweats on body; eyes discharging a watery Partial sweats on body; eyes discnarging a watery fluid. Ordered three ounces of whiskey and left nux vomica to be given in one ounce doses, with the whiskey, every four hours.

"2nd, 10 a. m.—Cow up and doing well, eating and drinking; pulse strong, 60; temperature 100.5"
F.; not much milk from udder. Left pulv. nux yom, and bicarh, ginger, and gentian one dram

vom., sod. bicarb., ginger, and gentian, one dram each, to be given with one ounce of whiskey three times a day. Three days after the owner reported the cow doing well, but not as large a flow of milk

as he expected. "Case VII.-June 10th, 7.30 a. m. Had calved forty-eight hours previous; placenta had been removed thirty-six hours after calving, when one removed thirty-six nours after calving, when one pound of mag sulph. was given. Fat, and medium milker; down, unable to rise; pulse 92; temperature 100.2° F,; respirations natural. Injected udder, and left liq. am. acet., two ounces, to be given eight hours afterward. 6 30 p. m.—Still down; symptoms favorable. Injected udder, and left liq. am. acet., two ounce doses to be given every six hours. two-ounce doses to be given every six hours.

"11th.—Owner reported cow up and doing well. Gave six powders of sod. bicarb., gentian, ginger, and nux vom., one dram each, a powder to be given

three times a day.

"CASE XV.—November 13th, 11 a. m. Holstein cow, fat, and very rich milker; calved twenty-four hours; down and completely helpless; pulse imperceptible; temperature 1° F. below normal, Injected udder, and instructions as to care; nothing to be given by mouth. 8 p. m.—Cow up; symptoms much better; injected udder; same care. Left liq. am. acet., two-ounce doses, every five hours.

am. acet., two-ounce doses, every nive nours.

"14th, 9 a. m.—Cow up and doing well. Left powders same as Case VII. In three days owners reported bowels constipated. Gave mag. sulph., one pound; aloes barb., three ounces. The cowneds a complete recovery.

made a complete recovery. "The above is a correct report of all the cases of parturient apoplexy treated by us during 1899. Of the fifteen cases treated, thirteen cows are alive, and I am of the opinion that if the owners had not interfered the other two would have recovered. Case I did not give as large a flow of milk this season as usual. In Case VI. the hair all fell off of the tail. In Case VII. one quarter of the udder was hadly swollen for a few weeks, but came all right. You will notice that Case V. and all cases since

received very little medicine. They were our worst cases, and made the speediest recoveries. Cases previous to Case V. were not so severe, and were tardy in their recovery, due, I think, to pouring down too much medicine. In the future we will give no more medicine than the case actually requires, and then not until the patient is able to stand or well able to swallow. The greatest difficulty with us in severe cases is to keep up the heart's action, and have had best results from nux vomica and whiskey, given in doses and frequency according to the case.

[NOTE.—Dr. Tennent, on being interviewed on June 11th, informed us that he has treat d eleven cases since those reported in the above article. In none of these was medicine given by mouth until the cows proved their ability to swallow by voluntarily taking a drink of water, and most of them had so far recovered as to get onto their feet. Some of the cases were so bad that swallowing in the early stages of treatment was quite impossible. Every one of the eleven cases have recovered.—ED. F. A.]

QUESTIONS AND ANSWERS.

[In order to make this department as useful as possible, parties enclosing stamped envelopes will receive answers by mail, in cases where early replies appear to us advisable; all enquiries, when of general interest, will be published in next succeeding issue, if received at this office in sufficient time. Enquirers must in all cases attach their name and address in full, though not necessarily for publication.]

Veterinary.

NO NAME, NO ANSWER. If Reader, Wellington Co., who wishes advice regarding an unthrifty horse ten years old, is or becomes a subscriber to the FARMER'S ADVOCATE, and sends us his name and address, we will endeavor to furnish him the best information at our command. We invariably adhere to the rule laid down at the head of our Questions and Answers department.

GLANDERS. SUBSCRIBER, Chickney, Assa :- "Can you supply me with any information on the following points: I have just had two horses shot for glanders. As soon as I noticed any discharge, I isolated them and sent for veterinary surgeon of the Mounted Police, and have burnt all surroundings where they were isolated. In the stalls where they were before I noticed any discharge, I first washed were before I noticed any discharge, I first washed everything with chloride of lime, then I mixed a box of Gillett's lye in two pails of water and scrubbed everything. The police veterinary advised whitewashing with 1½ gills of crude carbolic in a pail of water and made into whitewash with quicklime. This I have done.

"1. Will it now be safe to put other horses in the stalls?

"2. How long will the germs be contagious?
"3. What will prevent the other horses from developing the germs if they should have absorbed them, as they all drank from same water tub before I noticed any discharge?

"4. Is the test with mallein positive proof of the

"5. Where diseased horses have fed on prairie,

will prairie fire destroy all possibility of con-Your manner of cleansing and disinfecting your stable appears to have been sufficiently thorough

to insure destruction of all disease germs that may have been lurking therein; but, to make it perfect ly safe, it will be well to leave the stable or stalls unoccupied for at least two weeks after the work of disinfection has been performed, at the same time admitting plenty of fresh air.

2. The virus of glanders, after being separated from the animal, will retain its activity for various periods, according to the nature of the conditions to which it is subjected. A moist atmosphere and a temperature of 68° to 75° Fahr, will preserve the virulence of the germs for a long period of time.

The dried nasal discharge from a horse suffering from glanders has been known to convey the discharge from glanders has been known to convey the discharge from glanders has been known to convey the discharge from the first few days of the it had ease to a healthy horse sixty-five days after it had been separated from the infected animal. Sunlight or hot and dry atmosphere and good drainage are conditions which are very unfavorable to the longevity of the glanders bacillus.

3 If sufficient virus has entered the circulation to overcome the contagium-destroying properties of the blood, there is no known treatment, either external or internal, that will prevent the ultimate development of the disease. It is, however, of much importance to endeavor to maintain the healthy condition of your horses by proper feeding, cleaning and regular exercise in the open air. You should also strictly observe the hygienic measures necessary to keep your stable and its immediate surroundings in a sanitary state.

4. Mallein is not absolutely infallible as a test for glanders, but when properly applied it is gen-

5. Fire is a wonderful disinfector and purifier, erally reliable. and in the case you mention it would be most likely to destroy all disease germs with which it came in contact.

W. A. DUNBAR, V. S., Winnipeg.]

ENLARGEMENT ON CANNON BONE.

HORSEMAN:—" I have a colt two years old that got kicked on the cannon bone lest year. There is

got kicked on the cannon bone last year. There is still an enlargement on the spot where it was kicked, although thoroughly healed up. The skin is very thick on that part, and the bone seems to be a little larger than the other leg. Do you think anything can be done?"

Injuries such as kicks inflicted upon a bone that