

Winter Feeding for Eggs.

Editor "The Farmer's Advocate":

We need not expect a hen to lay eggs roosting on the fence and picking up her living in the barnyard any more than a dairy cow to fill a pail running around the straw stack in winter. Now, in the first place I will give the dimensions of the hen-house I used which was frame, 9 x 30 feet, mostly inside another building with little outside wall excepting on the south side. About 12 feet of the space was for roosting and the remainder a scratching pen littered with chaff into which the grain feed was scattered. Fresh water for drinking was supplied every day, and if any remained unused it was emptied outside. The hen-house should be kept clean the same as the horse or cow stable. My plan was to clean it well once a week, but I am satisfied that if time permitted it would pay to do it oftener, in fact, it ought to be done every day. My system of feeding was to give the flock of over seventy-five hens in the morning seven pounds of barley and after breakfast a drink which consisted of separator skim-milk warmed. The mid-day meal was six pounds of chop composed in the proportions of one part corn to two parts oats mixed with warm water. The evening feed consisted of seven pounds of whole corn. For green feed I gave them small apples, apple clippings and cabbages culled out from many which we grew. For grit I kept a small box two by three feet supplied with coal ashes. Hens require a little meat, and after butchering we saved the scraps and plucks for them. The grain feed amounted to about twenty pounds per day for the flock, which consisted of Barred Plymouth Rocks which had been graded up for some three years.

One season I began keeping tally to see just what the birds were laying. In the fall the old hens had been sold off leaving nothing but pullets, and from forty of them in January we got 96 eggs. We kept those 40 young hens over summer and added to the flock 38 spring-hatched birds which we raised that season. In the months of January and February we received 1,020 eggs, which at the price then averaged per dozen from the storekeeper brought \$22.10. Counting the feed at 20 cents per day for the flock the cost was \$11.80, leaving a profit of \$10.30 for the two months. During the month of March we secured 422 eggs, and during the whole year from 40 hens 5,000 eggs, which at the low rate of 14 cents each gave a return of \$75. Besides the eggs sold we raised 85 chickens, which at 30 cents each would return \$25.05 or a total of \$100.05. At the price of eggs now a very much better showing could be made.

Elgin Co., Ont.

M. CHARLTON.

HORTICULTURE.

Bordeaux and Sawdust for Storing Apples.

A few years' experimental work on the problem of "farm apple storage" has been conducted at the Vermont Agricultural Experiment Station and their results have been recorded in Bulletin No. 186. The findings are not applicable to commercial storage. They are experiments with dips, and mechanical mixtures or media which might contribute toward the preservation of apples. Readers will see at once that such methods of storing could be practicable only under farm conditions.

Among the protective dips used may be mentioned Bordeaux mixture, lime water and paraffin; while some of the mechanical media were cork sawdust, wood sawdust, leaves, sand, chopped hay and paper wrappers. Of the protective dips Bordeaux mixture was the only one that gave anything like satisfactory results. This seemed to ward off fungus and preserve the fruit. Furthermore, the flavor of all the apples dipped with Bordeaux mixture seemed to be retained to a remarkable extent. Sawdust was the best mechanical medium tried.

The successes with Bordeaux mixture and hardwood sawdust suggested a combination of the two. Apples were first dipped in the Bordeaux mixture and then packed in hardwood sawdust. It was found that this combination and this method of storage preserved the fruit longer and more satisfactorily than any one process or any other combination of dips and materials. The authors describe their methods in the following paragraphs.

"In view of the favorable results obtained with the Bordeaux-sawdust treatment, one may inquire as to the use a farmer or orchardist may make of this discovery. It is not the present purpose to discuss the full range of application of this new principle of apple storage; but a single suggestion may be of interest. In the first place the Bordeaux-sawdust treatment is not applicable to commercial quantities of apples. It is only of service to the man who is concerned in the preservation of the family supply and who lacks good storage facilities. Many varieties keep till mid-win-

ter in moderately good storage quarters. It is the late winter, spring or even early summer supply that calls for special treatment. It will, therefore, be necessary only to give special attention to the fruit designed for late use. To this end the author suggests, first of all, the careful grading of the fruit and the use only of perfect specimens. The apples may then be immersed in a 5-5-50 Bordeaux mixture for ten minutes. The use of a gunny sack expedites the immersion. They should then be allowed to dry and, before packing, should be cooled to as low a temperature as practicable, so be it they do not freeze. As the packing in hardwood sawdust proceeds, a plentiful supply of the filling material should be used in order to keep the individual specimens somewhat assunder. The sawdust should be well firmed. The barrel should be stored in a cool and cleanly place. Once a supply of good hardwood sawdust has been provided, it may be used repeatedly."

"There is no cause for anxiety in connection with the use of Bordeaux. The apples will be but slightly and locally colored with the antiseptic solution. Chemical analyses were made late in the storage period with a view of ascertaining the amount of copper salts on the apples and scarcely a trace could be detected. However, if the apples are pared no possible danger can befall. It should be remembered that a much longer interim elapses between immersion and use in the case of storage, than elapses between orchard spraying with Bordeaux and the utilization of fall apples which go into market at an early date. No one who was not looking for Bordeaux would be likely to observe the faint spots in the cavities of apples."

FARM BULLETIN.

Just Before Christmas.

It's comin' noo aboot the time o' year when the wee lads an' lassies will be thinkin' aboot Christmas an' wunnerin' what auld Santa Claus will be bringin' them for a present, gin they behave themselves an' dinna mak' ony trouble for their feyther or mither between noo an' the 25th o' December. It's a hard job tae drap a yer auld tricks at once an' tak' tae walkin' the straight an' narrow way sae sudden like. At least, that's the way I foond it in the fits an' starts I took at tryin' tae reform. Monys' time I hae spoiled my chances for a full stockin' on Christmas mornin' by ma tendency tae get in tae mischief. I mind one time ma wee brither an' I were sent oot tae the barn tae hunt for eggs. It was weel along in December an' what eggs there was layin' aboot were liable tae be frozen, but I didna ken aboot that then. I foond one wi' a lang crack in it, an' I says tae mysel', "It maun be rotten I guess, or it wouldna hae a crack like that in it." I'll see gin I can hit wee Dougal wi' it. He's over proud o' that new coat o' his." Sae I watched ma chance when he wisna' lookin' an' I flung the egg at him, intendin' tae dae ma mair than spoil the looks o' that coat. But the egg took him fair on the side o' the heid, for I hadna been vera careful in takin' aim, an' he just gle'd one yell an' went doon in a pile. I was unco' frichted an' ran intae the hoose tae get ma feyther. He cam' oot tae the barn an' picked wee Dougal up an' carried him in. Wi' me followin' him, an' wishin' it was day after to-morrow. Weel, it was mair nor half an' oor afore Dougal cam' oot o' his faint, or whatever it was an' began tae tak' notice o' what was gaein' on. He had a big lump on his heid, aboot the size o' a plum, but when ma feyther an' mither saw he was beginnin' tae cheer up again, an' was likely tae pull through, they began tae think o' ither things an' I cam' in for ma share o' attention. "Will ye tell me," says ma feyther, "what possessed ye tae be throwin' stanes at poor Dougal?" "It wisna' a stane," says I, thinkin' I saw a way oot. "It was just an egg. I'll be thinkin' it wis maybe the auld Plymouth Rock hen laid it an' that wis why it wis sae hard," says I, beginnin' tae cry. "The egg wis frozen, ye little scallywag," says ma feyther. "Gang awa' tae the bedroom till I hae time tae attend tae ye." An' I got ma trimmin'; there's na guessin' aboot that. But what was worse, wee Dougal got my share o' Christmas presents that year an' I foond naething mair in ma stockin' than a couple o' egg-shells filled wi' maple sugar. I wis mad enouch tae fling them baith awa', but after thinkin' aboot it a while I changed ma mind an' made the best o' it. But tae this day, gin there happens tae be an egg by ma plate at breakfast I'm reminded o' the scrape I got intae wi' ma wee brither Dougal, especially gin the egg happens tae be hard-boiled.

However, I canna' say that I always cam' oot at the small end, in ma transactions wi' ma parents an' brithers. I mind anither time, just aboot a year after the frozen egg accident, ma auntie happened tae be keepin' hoose for us for a couple o' weeks or so, an', although she had na bairns o' her ain she had great ideas o' trainin' those that belonged tae ither. This time I'm tellin' ye aboot was the day afore Christmas, an' ma auntie, bein' unco' busy wi' the

cookin' an' a', got ma brither an' me tae help her. "Here," says she, "you twa laddies tak' the seeds oot o' this package o' raisins, an' I'll mak' ye a couple o' wee pies for yer dinner." Weel, the thing looked a' richt tae me in mair ways than one, an' we went at it. Ma brither wis a smart little chap an' he worked awa' at these raisins wi' his mind on the pie, an' never a let-up till his share was a' feenished up. As for me, dinner an' the pie seemed a lang way aff an' I says tae masel', says I, "A chap ought tae hae a percentage on a job like this. I'm goin' tae tak' every third raisin for masel'." An' sae I did. But when we got through, ma auntie came tae inspect the work, an', says she tae me, "Sandy," says she, "ye dinna' seem tae hae as mony as Dougal. Where are the rest?" Wi' a ma faults I hadna' got doon tae telin' lies, so I says tae her, "Weel, auntie, I juist ate a few o' them. I took the seeds oot o' twice as mony as I ate, though," says I, "sae ye're gettin' them done pretty cheap." "Weel," says ma aunt, "gin ye's rather work on commission than for wages ye can gae wloot yer pie for dinner. Dougal can hae yours as well as his ain."

It was a hard blow for me, but I had tae pie up wi' it. Dougal ate the twa pies an' every once in a while he would be tellin' me how guid they were. I didna' say onything, however, an' along in the afternoon Dougal commenced tae complain o' feelin' sick. "I hae an' unco' bad pain here, Sandy," says he, pittin' his hand on his stomach. "Weel," says I, "I guess those twa pies are no' agreein' wi' one anither in sic close quarters. Ye'll maybe ken better than tae eat my pie the next time," says I.

Poor Dougal had a bad nicht o' it, an' it was some time the next day afore he was feelin' juist himsel' again. "I tell ye Sandy," he says tae me a guid while aifterwards, when we was talkin' aboot auld times, "I was beginnin' tae think this was a pretty tough auld warld onyway. Warkin' for salary wasna' muckle better than warkin' on commission. It's as bad to hae too much as to hae naething at a'. I'm thinkin' we baith got oor lesson oot o' the scrape," says he. "Yes," I says, "I guess we did."

An' I sometimes get tae wunnerin' gin onything ever comes tae us in this life that hasna' got its lesson tacked on tae it somewhere, gin we will only take the trouble tae look for it. This warld is naething mair than a big school in which we get oor experiences o' a' kinds, an' oor punishments an' rewards accordin' as we deserve them, sae far as I can see. Frae the time we're able tae stan' on oor feet we're gettin' oor bumps, an' I suppose we will keep on gettin' them until we try oor last examination an' pass oot o' this school intae some ither, where it's tae be hoped we'll hae a chance tae profit by oor hard experiences here. We are no' apt tae forget them sae lang as we stay on this job at ony rate. It's mony a lang year noo since ma brither Dougal an' me warked an' played an' lought on the farm thegither, but there isna' muckle a' it, that I dinna' remember. Talkin' aboot fightin' reminds me o' one time we were diggin' a cellar for the new hoose we were gaein' tae build an' Dougal an' me were sittin' on the bank takin' a wee rest aifter dinner afore gaein' back tae work. Dougal thoct he wad lay doon for a meenute or so an' tak' a bit o' a sleep, sae he stretched himsel' oot on the edge o' the cellar wi' his hat over his face an' in aboot ten seconds he was dreamin' o' "hame an' mither." The chance was too guid tae lose. I couldna' resist the temptation tae pit oot ma foot an' gie him a wee push, juist enouch tae send him over the edge o' the bank intae the cellar. He was mighty short in the grain, was Dougal, an' when he cam' up oot o' the mud an' dirt he juist made one jump an' got me by the hair wi' the intention I suppose o' killin' me on the spot. However, I had no notion o' dyin' juist then, gin I could help it, an' it wisna' lang afore we were baith rollin' on the ground. In oor struggles we got near tae the edge o' the cellar again, an' as luck wad hae it over we went an' Dougal got his second mud-bath that day. I wisna' muckle better mysel', an' when we got up an' looked at one anither we juist had tae laugh an' ca' the thing off. Dougal had a scratch on his nose an' I lost a handful o' ma hair, sae oor honor was maintained.

Some folks canna' see ony use in fightin' under ony circumstances, but I'm no' sae sure aboot it. I like tae see a chap stan' up for himsel' an' for what he thinks is richt even gin he has tae use his fists tae dae it. My school-days were what ye micht ca' a "seven-years war," an' I canna' think it did me ony harm. On the contrary, I'm pretty sure it did me guid an' that I'm the better for it tae this vera day. At ony rate we get considerable satisfaction in reviewin' the battles o' oor younger days, an' that's mair than we can say for mony a thing that we get mixed up in later on in life. When we quit fightin' we quit growin', no mistak' aboot that. Of course, I wouldna' say that I dinna' believe in arbitration, but that wad be in case the thing couldna' be settled by war. But I maun stop moralizin', Mr. Editor. I was juist intendin' tae tell ye a wee bit story ye ken.

SANDY FRASER.