Canaan Corn.,  
Dec. 2, 1903.

Sir,—  
Agricultural Experiment Station  
Stony Corn.,  

Respectfully,—  

The enclosed clipping was taken from our local paper last week, Nov. 14. I would like to know if it is a correct statement. Many farmers about here who have silos are interested.  

J. S. Adams.
Dec. 7, 1903.

Mr. T. S. Adam,

Canaan, Conn.

My dear Sir:-

Your letter of the 2nd inst. with enclosed clipping is at hand.

I have several times discussed the matter of silage with the Gale Borden representatives. While it is their policy to require that all of their milk be produced without the use of silage, yet they have told me that the reason for this is not due to the fact that good milk cannot be produced where silage is fed; but with one hundred different farmers all using silage, some of those men will be feeding silage which is mouldy and in poor condition. It is this mouldy and poorly kept silage which causes the trouble, and if that poor silage is to be fed to the cows which produce their milk, they have not way of preventing this trouble from the occasional farmer. To prevent all trouble they make the iron-clad rule that silage shall not be fed to the cows which produce their milk.

I believe that silage properly cured, and properly fed, never yet has injured milk; but that musty silage, or silage fed at the wrong time, namely just before milking or during milking, may injure the milk. In the article which you sent me it is stated that the value of silage has not yet been proven, and that corn put into the silo does not possess any more advantage over corn cured in the old way in the field.
The facts of the case are as follows:—Well cured corn silage possesses just about the same food value that the same corn would have possessed if cured in the field under ideal conditions. But as corn is ordinarily cured, and the corn stover allowed to stand in the field during the fall and for part of the winter, it loses in food value from 20 to 30 per cent. more than does corn properly preserved in the silo. Then where our corn is cured in the field, there is necessitated the labor of husking the corn and of grinding the corn, all of which labor and expense adds nothing whatever to the food value of the product. The silo provides us with means of securing a green succulent food during the winter, and this very succulence is something more to our farm animals than can be shown by actual analysis of the food. A chemical does not show that a bright red Baldwin or Northern Spy apple has any very great food value, and yet as a matter of actual experience I know that by eating two or three apples of this sort every day they surely aid digestion. This same result is probably secured by the succulence of the corn silage. In feeding dry corn stover, there is quite as much waste in the butts of stalks which the animals will not eat. In corn silage this waste is almost entirely done away with. It is practically impossible to cure corn stover under ideal conditions. There must be exposure to the weather, because if the corn stalks are taken away before becoming thoroughly dry, they become musty and of little value. There is no other way by which
the corn crop can be so economically cared for, and its food value so well preserved as by putting it into the silo.

It has some times been thought that by putting it into the silo adds a large amount to its food value, this is not correct, because we never take out of the silo as much in actual food value as we put in; but the losses are less than when the corn is cured in the field.

The eminent professor in New York who says that 30 pounds of silage contain acid equal to one and one-half quarts of vinegar, may be entirely correct in his statement, and yet if he knows anything about the physiology of cows, he knows that one of the first things done with the food after the animal eats it is to change it into acid condition; and that the acidity that ensilage may have is an aid to digestion rather than a hinderance.

Yours very truly,
Mrs. J. S. Adams,  
Stam. Ct., Dec. 10, 1903.  
Canaan, Conn.

My dear Sir:—

Your letter of enquiry as to the accuracy of the statements in the enclosed clipping has come to hand.

The statement in regard to acetic acid in silage is correct. The N. H. Agr. Expt. Station has been investigating the subject of acidity of corn ensilage. The results have been published in Bull. 96, pp. 115-117. The average of their results is 1.22% of acid, equal to 1.39 oz. of 4.6% vinegar (U. S. standard) in 100 lbs. of ensilage. Taking one of the lower percentages would give about 2 oz. in 30 lbs. of ensilage.

The effect of this acid on the cow may not be beneficial but it surely does not reduce the flow of milk. For when cows are fed ensilage they produce more milk and remain in good health. This shows that if there
is any bad affect of acid it is counterbalanced by the other good qualities of ensilage. Its affect on the quality of the milk does not show in its composition. It surely does not affect its acidity. Whether it causes some harmful product to be secreted is doubtful; I do not know that this question has been investigated. But anyone who understands how milk is made from the blood in the cow's udder will understand the impossibility of acetic acid getting into the milk. It is doubtful if it can get into the blood any more than the muriatic acid of the digestive fluid which is more volatile.

We have no reason to question the results of experiments in Henry's Feeds and feeding relating to this subject even if they are six years old. Corn containing 80% water would probably shrink from 29,800 lbs. of green fodder to 1330 lbs of field cured. If we allowed 15% loss of dry matter...
and estimated the amount of water still in
the stover.

The losses of dry matter in ensilage and
field cured corn are nearly the same, but
if we consider the physiological effect of
succulent feed on milk production, its
palatability, ease of handling, storage room
and the loss in feeding dry stover the
advantage is in favor of ensilage for
feeding purposes.

People who have used silage are in
favor of it and people of fastidious tastes
who use the products do most find fault
with ensilage produced milk.

The conclusions arrived at by the
writer of the newspaper clipping are
unwarranted by facts.

Yours sincerely
Canaan Conn.
Dec. 21, 1907

Dear Sir,

I would like to know the best and quickest way of Cordling milk in Winter. I tried to feed the Cord to my hens but do not feed a wet mash and twice from 10 to 15 hens away the whey. How much of the feeding value of skim milk can I lose in doing so?

Yours truly,

Joseph F. Adam
P.O. Box 123.
December 23, 1907

Mr. Joseph F. Adams,
Canaan, Conn.

Dear Sir:

To curdle your milk quickly, buy some rennet extract. You can get this at the drug store I think, if not send to the D. W. Burrell Company, Little Falls, N. Y., and get a pint. The amount necessary to use will depend upon the time in which you wish to curdle the milk and upon the age, or degree of acidity of the milk. By making a few tests, you will be able to tell just how much rennet will be required to do the work. Not much of the value is lost in the whey, to be sure a little of the fat is lost in this way, but not much.

Yours very truly,