Mr. Scott—I think you would be a little safer in plastering.

Mr. David Imrie—We have a cement water tank in our house; it is about two inches thick and it never absorbs water. That was simply washed with a cement wash. If you make your concrete rich enough and give it a wash inside of clear cement and water, two coats, then a few years afterwards give it another wash, your silage will be good right up against the wall.

Mr. Scott—I agree with you if the wall is sufficiently dense and you are using a 1:2:5 mixture, but in a great many cases a 1:2:7 or 8 is used. On those walls I believe the plaster would be the safer.

Mr. Cheesman—Ninety per cent of Chicago’s milk is produced within seventy-five miles of Chicago. By building silos with more height, I believe you will get more pressure and greater storage capacity within convenient reach.

Mr. Scott—That may do in the south. I think in the north forty feet would be the limit, as the corn there carries more moisture and in the bottom of silos of great depth there is so much juice expressed by the greater pressure that we find the silage more acid than in the more shallow silos.

HOG HOUSE CONSTRUCTION.

[John D. Imrie, Roberts.

In taking up this topic as given in the program “Hog House Construction”, I will do so more from the practical hog farmer’s or raiser’s standpoint than that of the fancy breeder, and in doing this I wish to state in the beginning that in thirty years of hog raising and feeding I have found that for best results as to health and growth the pig or hog should not spend most of his lifetime in any kind of a hog house or pen, as the young of all farm animals, especially the pig, needs plenty of good, healthy exercise to keep in the best condition and make the most rapid growth. Therefore I will speak more especially of the house for farrowing and feeding purposes than as a living place.

There is one kind of a hog house that I like better than any other. Figure 1 shows a plan of a very good hog house of thirteen farrowing and feeding pens,
is 50'x20' and 8' posts. The feed room is 8'x12', with water in same. This is called the double house and is very handy, but has some serious objections in that the yards on the north side are in the shade most of the day, is rather expensive and has no room for corn or other feeds. Figure 2 shows the elevation of this kind of house.

As I have used both the double and single style of hog house, I must say I like the single style as shown in figure 3 far better. This one is 16'x80', 8' posts, containing ten farrowing pens, with a feed room 8'x12', with water supply and place for swill barrels. The feed alley is four feet wide and the corn crib which extends the entire length of the house is four feet wide at the bottom and five at the top of posts. This is the best, handiest and cheapest house for its size I have seen. The advantage as regards farrowing pens is that all pens have a southern exposure and have little yards 7'x16' in which the pigs can take needed exercise when the mud is too deep to turn them in the yard or field. Figure 4 shows the elevation of this kind of house.

Figure 5 shows an A-shaped hog house, which has a good many things to recommend it as a farrowing pen. The main objection to this kind of house is that where from 12 to 20 brood sows are kept too much time is taken up in feeding and caring for the pigs. When help is scarce and high-priced, this is a serious fault and in a muddy time it is not a pleasant job to wade to each pen to feed twice a day; however, this is a good house where only a few sows are kept.

Figure 6 shows fenders for farrowing pen. They are made of 2''x6'', 3 feet long and fastened as shown in cut eight inches from the floor. They are to prevent the mother from overlaying the pigs when returning to the nest. This is an important part of the farrowing pen. The little pigs learn to get under the fender two or three days after birth. This arrangement has saved the life of many a pig, so do not forget to put in fenders.

I like the concrete floor best, as it can be kept clean and sanitary. The floor in each pen should slope about an inch toward the trough, where there should be a shallow gutter to carry off the liquid. This gutter should run along the entire row of pens and follow the wall of the last pen to the outside of the house. This keeps all liquid from spreading over the floor and making the
bedding damp. In case of a shortage of good bedding, it is a good plan to make a platform of 4’x4’ of inch boards, with a 2”x4” nailed flat-wise on two edges. Lay this in the corner of the pen as shown in figure 3. This helps to hold the litter and keeps the pigs from contact with the cement.

As the comfort and health of the pig or hog is the first item to be considered and the saving of time in feeding and caring for them must also be taken into account, I think the plan as shown in figure 3 will come the nearest to the needs of the practical hog raiser.

Mr. Imrie—No, I have not. The platform is simply to keep the little ones off the cold cement.

The Member—If you insulated in that way, you would have a warm floor. Do you let the little pigs run around on the cement floor?

Mr. Imrie—Yes, but I always keep it well bedded.

Mr. David Imrie—If you have these little platforms in each one, they will stand on those a good deal of the time.

Mr. John Imrie—in our actual practice of raising hogs on the farm, they are in these pens only a few days, that

**DISCUSSION**

Mr. Imrie (Continuing)—I like the open pens facing south, where the little ones can get sunshine all day. There is one improvement I would make another time: I would have these gates so I could swing them alongside of the hog house, so I could drive right in and clean out those pens.

Mr. Jacobs—What is the floor of those pens?

Mr. Imrie—Cement, by all means.

A Member—Did you ever try to insulate those walls by having some dead air chambers underneath, so you would not want a platform?

is, all day long. A few days after birth they are let out into the field, or yard, unless too muddy. As soon as they begin following the mother, they are all right.

A Member—That platform is bottom-side up?

Mr. Imrie—No, the 2x4’s are on the upper side.

A Member—How are the partitions built?

Mr. Imrie—They are made of inch boards, with a door passing through each one to let the little pigs pass into the next pen to eat.

A Member—in some places they are building these houses of heavy steel.
Mr. Imrie—Of course that would be more expensive. This kind of a hog house, the material for it, costs about $250.00.

A Member—Are the partitions movable?

Mr. Imrie—No, they are not. I have seen some where about half the partitions were movable, and it is a very nice arrangement, but in our practice our hogs are fed mostly outside; mostly spring pigs, growing over the first season and then fattened for market.

A Member—You don’t have the cholera?

Mr. Imrie—Not for thirty years.

out on the ground. In that big hog house he has no place to go out of doors, except in the mud, there are never satisfactory surroundings. You want to have it so you can easily move that hog pen and change the ground.

Mr. Imrie—When you have fifteen brood sows, it is an hour’s job to feed those sows if they are in small houses, and in muddy times you will have to wade in a lot of mud to give them their swill. It works all right up to about six, but if I have more than six brood sows, I want a clean place where I can feed rapidly, and keep them clean; time is money.

Mr. David Imrie—We had it in our neighborhood a year ago last fall but we were out of the district. If there are hog cholera germs about you are sure to get it.

Mr. John Imrie—I think if a hog is perfectly healthy, there is more resistance to hog cholera germs; however, if the hog comes in contact with the germs, in all likelihood the cholera will develop in the herd. The only immunity is the power of resistance.

Mr. Jacobs—I would like to say a word in favor of our friend’s small pens. I feel that that is the most serious problem with the little pig—when he is a few days old he wants to get

A Member—You better not have more than six sows if you do not keep them clean.

Mr. Imrie—We keep our pigs clean.

A Member—If you can keep your hogs clean and give them good, clean feed, are you likely to have hog cholera?

Mr. Imrie—It is a great help in avoiding it.

Mr. Rasmussen—When I was in Denmark last year, I went to a great many big farms. I was interested in hogs and cattle. I went to one large place where they had a double hog house with a cement floor and a feeding alley up the center. I think they had about fourteen pens. They always
had one pen empty and one was cleaned and whitewashed every day. Then the next day another one was cleaned and whitewashed, so they were all cleaned that way regularly, and they never had the cholera. In order to keep them clean, they had a platform elevated one foot, and the little pigs always went up there themselves.

Chairman McKerrow—A pretty good plan. You won’t have cholera if you have everything all right. Just the same, there have been cases where everything seemed to be clean and yet they had the cholera.

A Member—What do you disinfect your hog house with?

Mr. Imrie—I never use anything but fresh lime.

Mr. David Imrie—We had an old Scotchman from Canada once who had his hogs sleep upstairs, so they would keep clean. He had stairs for them to go up and he said he had no trouble teaching them to go to bed.

Mr. Campbell—Some twenty-five years ago I met Mr. McKerrow and he recommended the A-shaped pens. Well, I had a set of them made. I have twenty-five little yards about twenty feet deep and four feet wide. I agree with what Mr. Imrie says about the mud. When you are feeding twenty-five brood sows, you go wading through considerable mud and I made up my mind to have a different kind of a pen. We keep our conditions as clean as possible as a preventive of hog cholera, but even that will not prevent it coming in your neighborhood. I have lost some forty-odd head before we got through, and they couldn’t be in better condition than they were when it caught them.

A Member—Do you think you know any more about it than you did twenty years ago?

Mr. Campbell—I cannot say that I know anything about it. We vaccinate our hogs now and we do not have it.

Mr. Imrie—About thirty years ago I rented father’s farm and we had about one hundred and fifty hogs running free. We lost all but one with cholera. When we had about forty-five left, I bought a young sire, a splendid young
animal, he was right with those hogs every day and he never contracted the cholera, so I think there is something in the resistance idea. He had been fed and treated right.

Mr. Cheesman—Most everybody leans heavily on the serum treatment. I am not going to discuss that, but I want to tell you something that was done in Massachusetts a few years ago. A certain man had an awful dose of hog cholera. We called in the faculty of the medical college. We had about fourteen left, we turned them out in the month of February on the snow and ice and they all got well.

A Member—Over in our country, a neighbor had sixty hogs. They began to die last September, he called the veterinarians in and one prescribed for swine flake, and another for hog cholera, but they did not succeed in stopping it. I killed one of those hogs and opened his throat, and he had this tumor under his neck containing a nasty liquid. We cut that open and I took a microscope and examined it, and we could see germs and those wire worms, even with the bare eyes. Then we cut farther down and all along we found those little wire worms, even in the lungs and the intestines. We killed another and it was the same way.” The man lost all his hogs.