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1/24/11

AGRICULTURAL ENGINEERING EXTENSION WORK AS CARRIED ON FROM
JANUARY FIRST TO JULY FIRST.

On returning to work the first of January I had a conference with Mr. Jones and it was decided to spend the first six months of my time in the office, if necessary, drawing plans for farm buildings. Besides working on farm building plans during these six months, I have sent out several hundred letters in answer to inquiries on drainage and other agricultural engineering subjects. Letters were also sent out to tractor owners. This was also done in cases of farmers owning improved farm machinery.

A trip was made to Richmond in January to attend the Farmers' Institute and read a paper on farm machinery before the farmers' meeting. During this trip arrangements were made with W.F.Hobart of Richmond for making blue prints of our farm building plans. The farm building plans are worked out on tracing cloth which are sent to Mr. Hobart to prepare blue prints from. He has made negatives of all tracings so that it will not be necessary to use the original tracings. As he has these negatives on hand, blue prints can be ordered from him at any time.

Several trips were made to Fincastle, Va. where a drainage survey was made of Mr. R.W.Thompson's farm and map prepared showing the planning of his drainage system. On one of these trips the work was staked out and help was given him on starting the traction ditch. He has about finished the ditch on his farm and has several contracts with farmers near him. He wishes to sell the steam ditcher and buy a new gasoline ditcher. Every effort should be made to help Mr. Thompson

dispose of this machine as it was through our advice that he purchased it, and if he buys a new one it will guarantee a great deal of drainage work being done in Botetourt county.

A trip was made to South Boston where advice was given on several drainage projects, and arrangements were made to carry on terracing demonstrations this coming fall. This is a very important line of work as there are hundreds of acres in Halifax County to be reclaimed by terracing.

A trip was made to Ferrum, Va. and a survey of Prof. Saunders' farm made. Levels were taken and advice given him on drainage of about 50 acres of his low lands. Prof. Saunders has since finished laying most of his tile and is getting wonderful results.

A trip was made to Curles Neck farm near Richmond and advice given Mr. Keeley on the re-arrangement and re-modeling of farm buildings; also on drainage work. Advice was given on the location of four concrete silos ^{building} which are at present time being built.

A trip was made to Greenville, Brunswick and Southampton Counties for the purpose of constructing terraces. Levels were run and terraces built on one farm in each of these three counties. The farmers were very much interested in this work and the County Agent is very anxious to carry on this line of work the coming fall. Advice was also given to several farmers on drainage, there being a great deal of drainage work needed in this section.

It had been planned to hold agent's meetings in that section of the state where the county agent would be instructed in the use of the level and building terraces so that the agents can handle this type of work without calling on the specialist.

A trip was made to Franklin at the request of Mr. P.D. Camp in regard to placing a ditching machine in that section of the state. Mr. Camp is very much interested in this project and at the present time is corresponding with Mr. Thompson at Fincastle in regard to buying the steam ditcher.

Mr. Whitehouse who operates a ditching machine on the Eastern Shore has recently purchased another machine for that section as he had more work than he could do with the one machine. Three years ago there was not a foot of tile laid on the Eastern Shore and now several hundred acres have been tiled, with wonderful results. The farmers in that section are thoroughly convinced that drainage is the thing they need and they are all planning on doing some tiling.

The following is a list of the farm building plans drawn while in the office:

MOVABLE HOG HOUSES.

- Plan B 1-1 (A) Shaped movable hog house with doors hinged at side
- Plan C 3-1-7 (A) Shaped movable hog house, with doors hinged at top
- Plan C 6-1-10 Gable roof movable hog house

SELF FEEDERS

- Plan C 2-1-6, One way self feeder for hogs
- Plan B 3-1-5 Two way self feeder for hogs

CONCRETE PLANS.

- Plan C 4-1-8 Concrete feeding floor for hogs.
- Plan C 7-1-11 Concrete hog wallow and dip
- Plan C 5-1-9 Concrete feeding and watering trough

POULTRY HOUSES

- Plan B 4-1-12 Farm poultry house, shed roof type, 10 x 20 ft
- Plan B 5-1-13 Movable Colony poultry house, 6 by 8 ft
- Plan B 3-1-17 Laying house, combination roof, 18 x 30 ft

BARN PLANS

- Plan 7-2-15 & 16 Plank barn frame for barn 36 ft wide braced rafter construction
- Plan B 9-2-18 & 19 Plank barn frame for barn 36 ft wide, truss construction

These barn frame plans are recommended for building dairy, beef and general purpose barns. With the use of these plans the farmer can arrange his floor plans to suit his own requirements.

HOG HOUSES

Plan B 6-1-14 Community hog house, $\frac{1}{2}$ monitor roof type for 12 sows.
Feed room and storage room at one end.

Plan B. 2-2-2 & 3 Sunlit hog house for 20 brood sows. This is the most
improved type of hog house and is highly recommended.

SILOS

Plan B 10-1-20 Wooden Hoop silo with bill of material and specifications
for any size wanted.

Plan B 11-1-21 Stave silo with bill of material and specifications for
any size wanted.

Other plans being drawn are dairy barn, beef barn and general purpose barn.

These plans have not been finished.

Material for bulletin on poultry house construction has been prepared and
will be turned over to Mr. Talcott for publication.