UNIVERSITY OF KENTUCKY

COLLEGE OF AGRICULTURE

Extension Division

THOMAS P. COOPER, Dean and Director

CIRCULAR NO. 183.

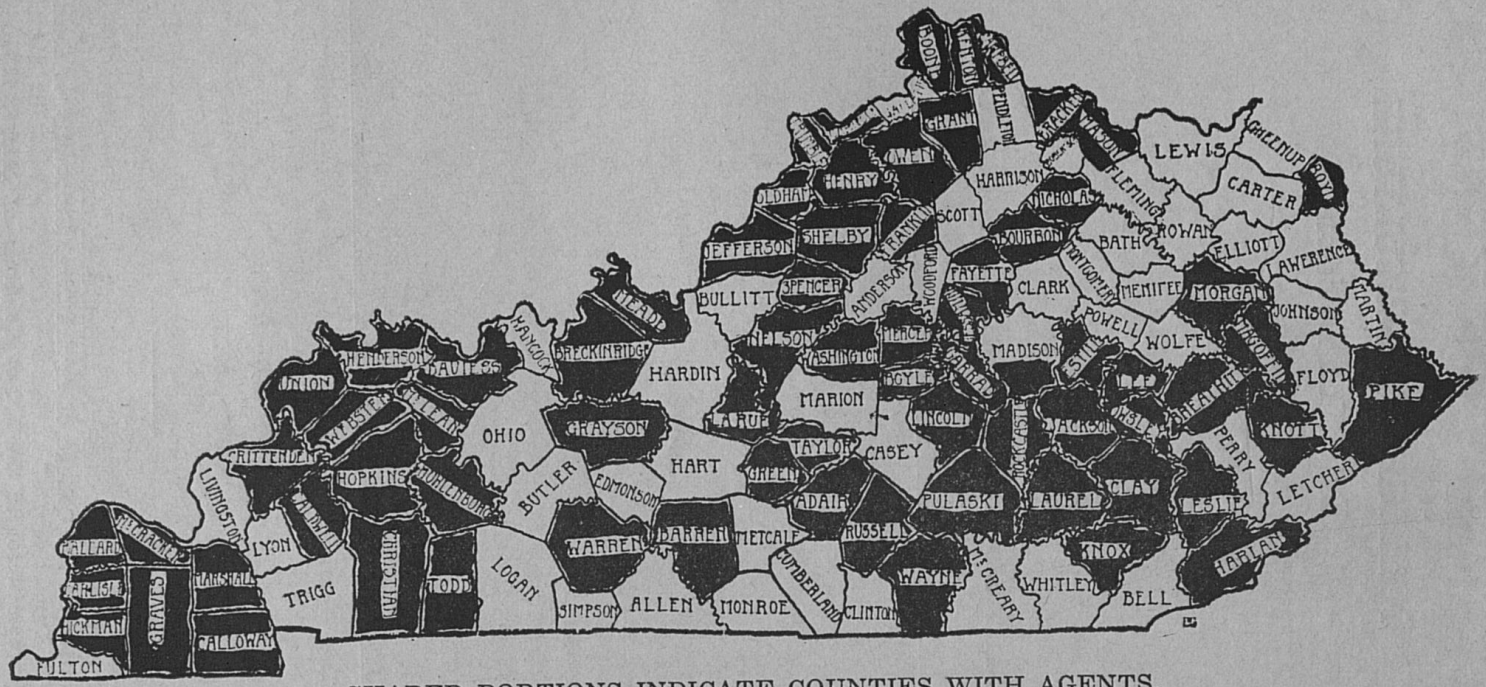
THE COUNTY AGENT IN ACTION.

The County Agent gives instruction in the field.

Lexington, Ky.

July, 1925

Published in connection with the agricultural extension work carried on by cooperation of the College of Agriculture, University of Kentucky, with the U. S. Department of Agriculture and distributed in furtherance **of the work provided for in the act of Congress of May 8, 1914.**



SHADED PORTIONS INDICATE COUNTIES WITH AGENTS.

The number of counties with agents has grown from seven (7) in 1912 to seventy-one (71) at present writing, an average of more than five (5) new counties annually.

CIRCULAR NO. 183.

The County Agent in Action.

Prepared by E. J. Kilpatrick, Assistant State Agent

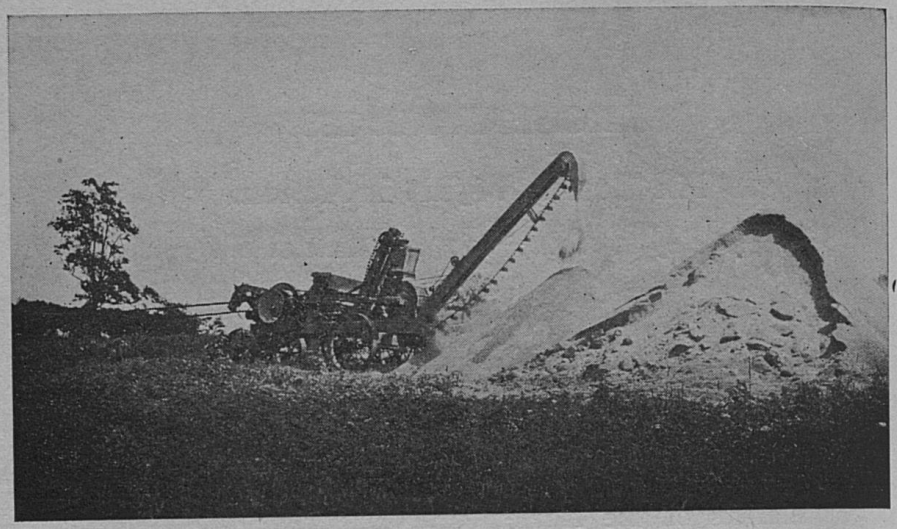
The County Agent is a trained agricultural leader, employed jointly by the U. S. Department of Agriculture, the College of Agriculture, University of Kentucky, and the county in which he works. He is not a specialist in all lines but has available all the specialists of the Agricultural Experiment Station, the College of Agriculture and the U. S. Department of Agriculture. His field covers practically every phase of farm improvement, including not only soils, crops, livestock, farm management and marketing, but also the home and community life.

A steady growth in Kentucky in the number of counties employing Agents is evidence that their work has been of public service. The counties yet without Agents are losing an opportunity to develop and improve their agricultural resources.

The photographs presented herewith illustrate a number of the activities of the Agents and the Extension workers in general. The program for any one county naturally does not include all the projects mentioned; however, it should be possible to select several lines of work from the many suggested which would be applicable to any county.

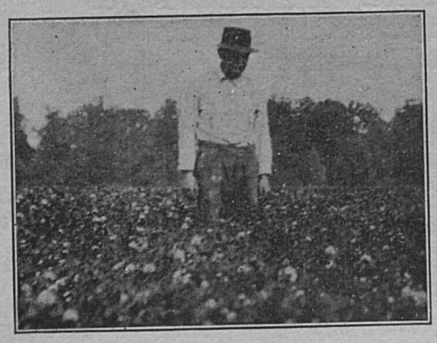
an average of more than five (5) new counties annually.

SOIL FERTILITY AND EROSION are two big problems for the Kentucky farmers.



Crushing limestone. Garrard County.

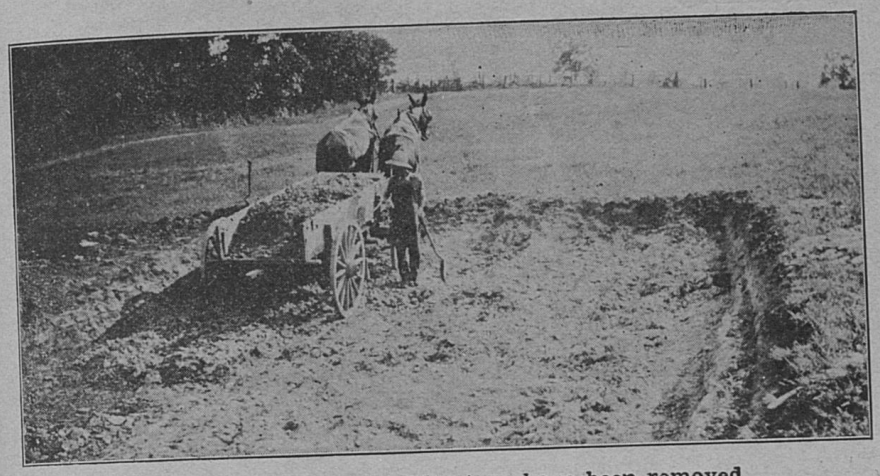
DEMONSTRATIONS in CLOVERS and other **LEGUMES** form a part of the program of practically every Agent in the state. Limestone for clovers or alfalfa was used on nearly 1,500 farms in 1924 for the first time. The total quantity so used by all farms amounted to



Clover with limestone. **Without limestone.**
Demonstration of limestone on clover—Todd County.

aproximately 75,000 tons. Single counties have used as much as 15,000 tons in one year. Calloway county boasts of a farmer living ten miles from the nearest railroad station who has limed his entire 250 acre farm and grows not only red clover but also sweet clover and alfalfa.

MARL also is a source of lime. Wherever available it is usually much cheaper than ground limestone. A typical bed is shown below.



A marl bed from which fifty tons have been removed.

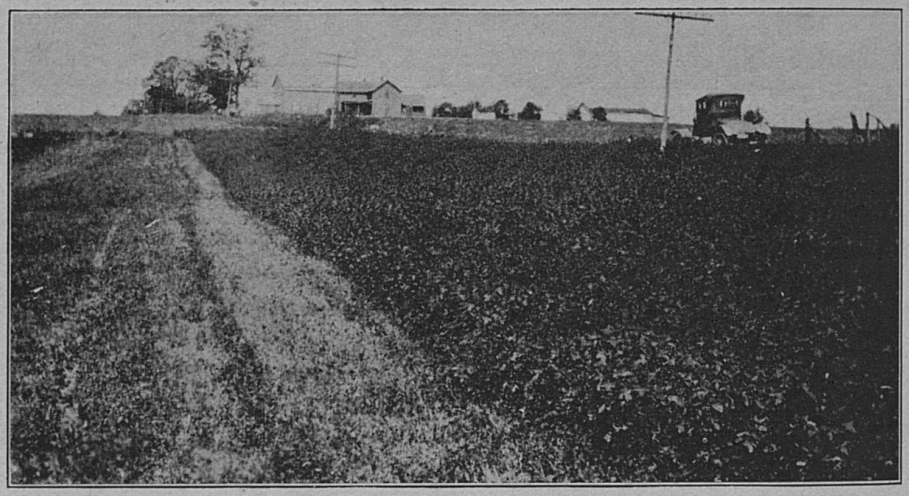
Marl beds were located by County Agents and Field Agents from the College of Agriculture in more than sixty counties during the past year. Single beds in many counties contain thousands of tons. In Nelson County for example, sufficient marl deposits have been discovered on one farm to spread two tons per acre on every acre of improved farm land within the county. Sufficient deposits have been located in Taylor County to cover 35% of the farm land with not to exceed a "one mile haul." It is reasonable to expect that other deposits will be found not only in counties where deposits have already been located and analyzed, but also in other counties in the limestone areas of the state. As a source of lime for agricultural purposes a bed of marl analyzing as much as 40% calcium carbonate, located at an accessible spot on one's farm, has no equal. Experts at the College of Agriculture estimate that the finding of these enormous beds of marl in so many counties is worth several times the entire cost of County Agent work to a single county for a period of ten years. To say the least, it represents a most remarkable and timely discovery of one of Kentucky's great natural resources.

Kentucky has only 3.3 acres of legumes for every hundred acres of improved farm land. In comparison with similar acreage in other states of the union she stands in 46th place. A greater acreage of legumes of all sorts is necessary to build up the poorer soils of the state.

The farmer who demonstrates the use of ground limestone, marl or burned lime on a clover fiield on his own farm sees "for himself" the value of lime and clover and sets an example to the community in good farming.

Nelson County.

Clover with marl. Clover without marl.



An alfalfa demonstration in Trimble County.

Alfalfa returns more tons of feed per acre than red clover. Harrison County last year without an Agent sowed 600 bushels of alfalfa seed. Grant County adjoining, with an Agent sowed nearly 1,500 bushels. Result, Grant County has 4,000 more acres in alfalfa than one year ago, whereas Harrison increased her acreage less than half that amount. Nelson, Mercer, Washington, Campbell, and Nicholas are a few of the counties in which Agents have done a great deal of work in increasing the alfalfa acreage.

THE LIMEKILN REFUTES the statement often made by farmers that "I haven't money to do things the Agent recommends." The farmer who burned this limekiln did not need money to follow the

Limekiln built in Breckenridge County under the direction of Agent Joe Nageotte and Earl G. Welch from the College of Agriculture.

Above kiln after burning.

Agent's advice; instead he used labor at odd times to pile rock, cut the wood and burn the kiln. **ABSOLUTELY PRACTICAL** wasn't it?

TERRACING HILLSIDES prevents erosion. **DEMONSTRATIONS** in terracing have been given in about 25 counties. The results obtained have been most satisfactory.

A terraced hillside in Mason County. This is the first terrace built in Kentucky according to plans of the College of Agriculture.

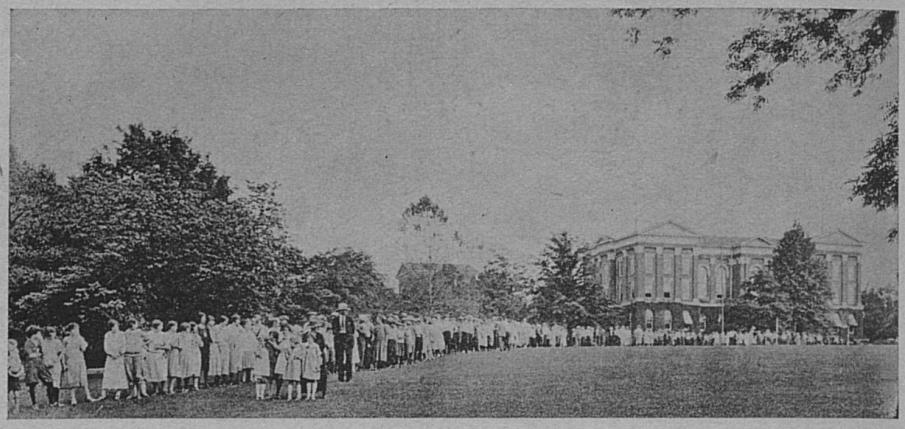
A terracing demonstration in Todd County.

The County Agent carries scientific information to the farmer, shows him how to put it into practice and lets the farmer judge the results. The tobacco picture answers all the "bugaboo" as to whether science is practical.

County Agent Gabbert, Fayette County, inspects a demonstration in root-rot resistant tobacco, seed of which was furnished by the Kentucky Agricultural Experiment Station.

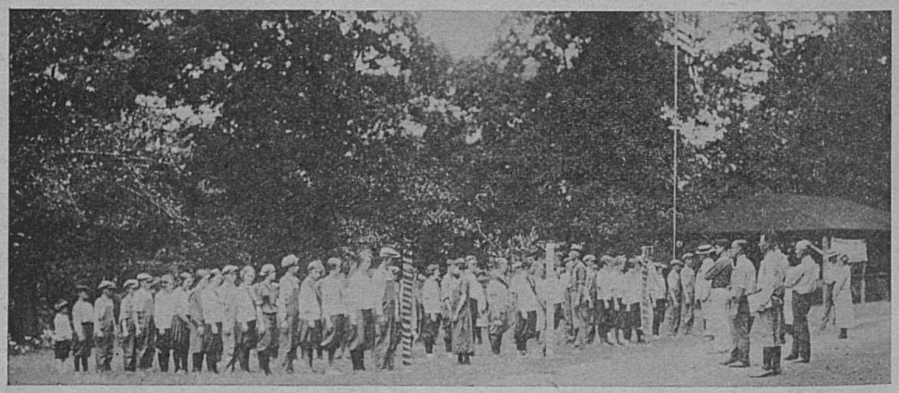
County Agent Whalin inspects a cotton demonstration in Ballard County during first picking. Early maturing varieties such as Trice and Express have given the biggest yields.

TRAINING THE FARMERS OF TOMORROW is an important part of the Agents' work. Boys and girls are organized into Junior Agricultural Clubs in practically every county employing an Agent. They are taught to use both hands and head and to appreciate the farm home and rural life. About 20,000 boys and girls enroll annually in junior club work.



Junior club members on the University campus, **Junior Week, 1924.**

From **400** to **500** club members spend **one week** at the University each year where they receive valuable instruction in **agriculture, home economics, care of health, recreation** and **cooperation.** The club camp teaches the country boy and girl team work, recreation and care of health, in addition to agriculture and home economics.



Totem pole line-up—Madison and Rockcastle County club camp, 1924.

SCENES AT JUNIOR CLUB BABY BEEF SHOW AT BOURBON STOCK YARDS, LOUISVILLE, DECEMBER, 1924.

1. Champion five steers, fed and exhibited by Garrard County Club members.
2. Champion steer, fed and exhibited by James Robinson, Boyle County. This steer sold for 80c per pound.
3. Champion carlot, Garrard County Club members.
4. Champions of each breed: Angus—James Robinson, Boyle County. Shorthorn—Garvey Hayden, Washington County. Hereford—James Judge, Nicholas County.

FEEDING BABY BEEVES gives the boys valuable **training** for their **future work** as farmers. **More than 200 boys and girls enrolled** in the **baby beef clubs** during 1925.

POULTRY IS AN IMPORTANT SOURCE OF INCOME FOR KENTUCKY FARMERS. CULLING the slacker hen is one of the surest ways of improving the flock and increasing profits.

One of the demonstrations in poultry culling, as carried on in every county with an Agent.

Following is the result of culling demonstrations in Fayette County during 1923, which is typical of many counties:

Number of demonstrations	23
Total number hens	1,614
Number good hens	1,09.
Number culls	516
No. eggs from culls one week after demonstration	56
Ave. for week—1 egg to 9 hens.	
No. eggs from good hens one week after demonstration	3,567
Ave. for week—3½ eggs per hen.	

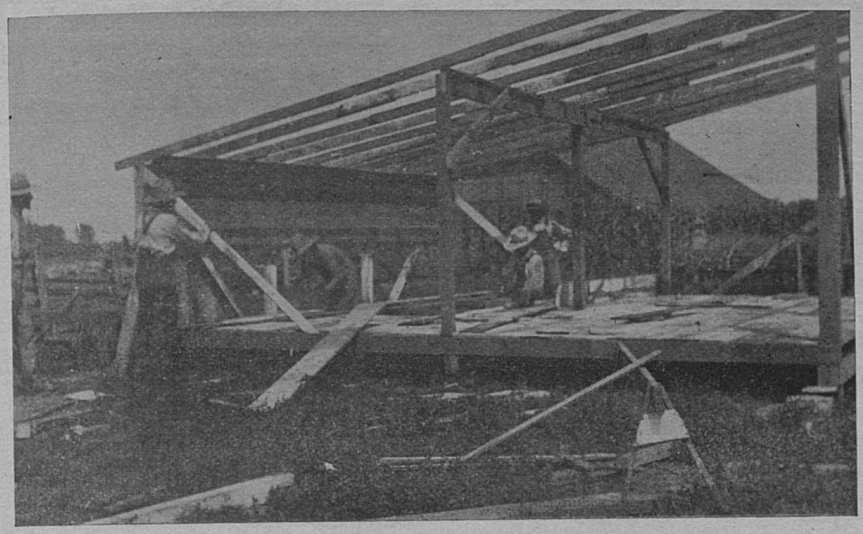
The **good hens** were **thirty** times as productive as the **culls.**

Other poultry projects include distribution of purebred hatching eggs, certification of purebred flocks, feeding and housing.

Distribution of purebred hatching eggs thru poultry associations, banks and produce dealers had a small beginning in 1915 when 19,000 eggs were distributed. **This number grew to 499,835 in 1920 and at present exceeds a million.** Single counties have distributed as many as 15,000 in one year.

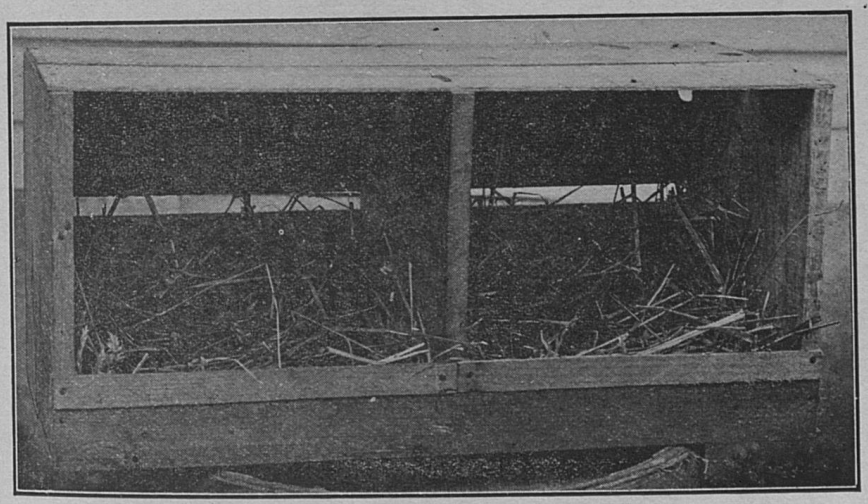
CERTIFIED FLOCKS must lay an average of 120 eggs per hen, which is slightly more than twice the production of the average hen of the state. **Eighty-eight flocks** were certified by specialists from the College of Agriculture in 1924, **90% of which were in counties with Agents.**

PROPER HOUSING OF POULTRY IS GIVEN ATTENTION ALSO.



Poultry housing demonstration in Leslie County.

Plans for remodeling old houses or for building new ones were furnished 727 farmers in sixty counties during 1924.



Cheap, satisfactory nests made from an orange crate.

The Agent advises to do the thing most practical under existing conditions. This Agent had an eye to economy when he showed a farmer how to make hen's nests from orange crates.

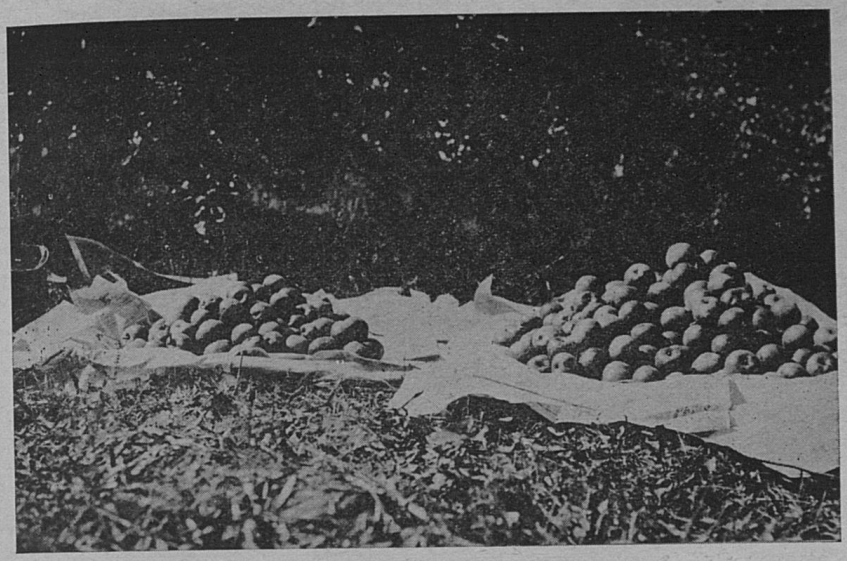
The average home orchard in Kentucky, with very little work, will supply fruit for the family. A Shelby County farmer followed instructions during 1924 in pruning and spraying his orchard. He spent $20.00 for spray pump and spray materials, sold enough fruit to pay the bill, gave some to his neighbors, and had enough left for home use. The orchard previous to that time, had been a dead loss to the owner.

A fine young orchard in McCracken County. The owner calls on the County Agent frequently.

Many sections of the state are well adapted to commercial fruit growing. In a few counties the **demonstrations in growing** and **marketing** various sorts of fruits are **major activities** in the **Extension program.**

One of the field-days held annually in commercial fruit sections.

INVITING THE NEIGHBORS TO SEE THE RESULTS OF A DEMONSTRATION AND TO ASK QUESTIONS MEANS MORE THAN READING ABOUT IT IN A BOOK.



Apples from one tree, sprayed and fertilized—117 lbs. of marketable fruit, 31 lbs. of culls.

Apples from one tree without spray or fertilizer—one lb. (5 apples) of marketable fruit and 31 lbs. of culls.

SPRAYING AND FERTILIZING often means the **difference** between **profit** and **loss.** The farmer who grew these apples found that so called "book larnin" about bugs, insects, spraying and fertilizing was both practical and profitable.

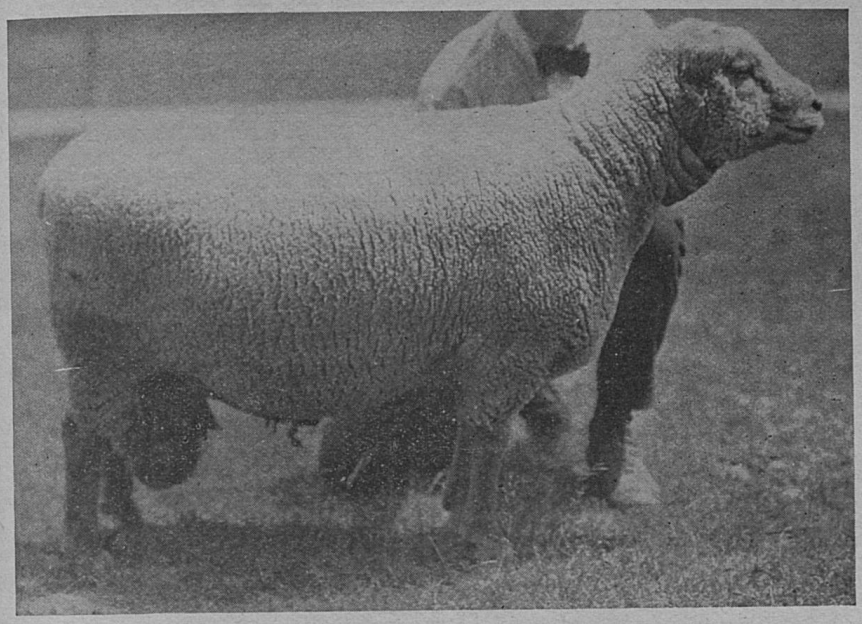
THE DAIRY COW is the most efficient food-producing animal on the farm. A few cows on the average farm pay the grocery bill, keep the children in clothes and buy school books. **TEACHING** the farmer how to feed, house and care for the cows and at the same time improve the breed is a very important part of the Extension program.

The type of purebred bull being purchased on recommendation of County Agents.

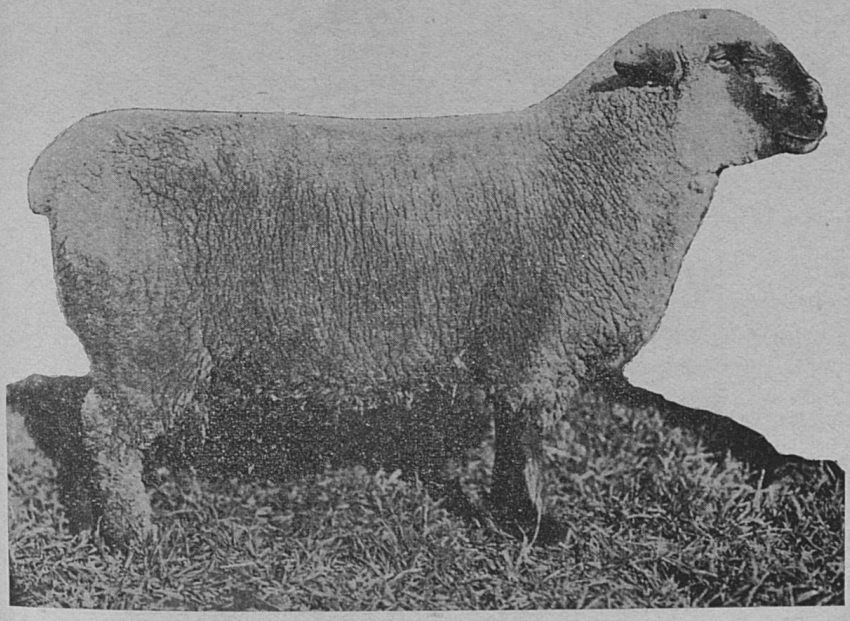
County Agent Pace, of Carlisle County, reports that 5 bulls like this one were brought into the county in 1924. Several other counties did equally well. The daughters of a common cow by a purebred sire in Campbell County, according to County Agent Link, produced 45% more milk and 34% more butterfat than their dam, on the same feed.

Dairying in Taylor County, under the leadership of a County Agent, developed from practically nothing to a $100,000 business in seven years. Green County, adjoining, without an Agent until February 1924, only recently established her first cream station.

FIVE HUNDRED AND FOUR FARMERS, in forty-nine counties, were assisted by agents in purchasing purebred rams during 1924.



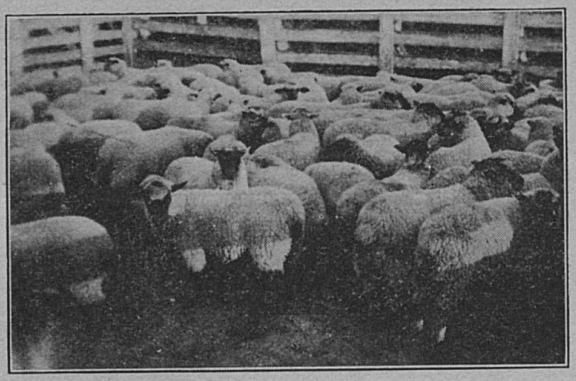
Purebred Southdown Ram. Grade and purebred lambs sired by him have been prize winners.



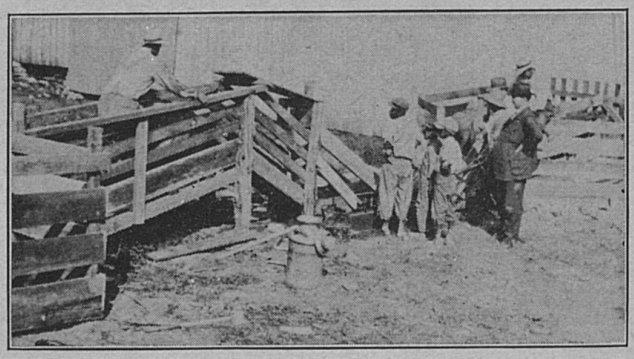
Purebred Hampshire Ram. His lambs reached market weight at an early age.

A prize winner lamb sired by a pure-bred ram and raised by a Junior Club member.

L A M B S that are both **docked** and **castrated** bring from $1 to $2 per cwt. above all others. The average premium on the Lexington market, 1924, was **$1.45** per cwt. **Demonstrations** in docking and castrating began in 1921 and have been continued since both by specialists from the College of Agriculture and County Agents. The number of lambs so treated has increased from 10,000 in 1920, prior to the docking and castrating campaign, to more than 300,000 in 1925.



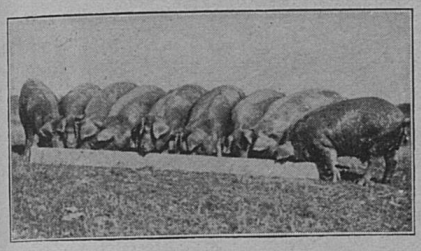
A demonstration car of lambs ready for market—Mercer County. Every lamb has been docked.



Sheep breeders in Cox's Creek—Nelson County—build a community dipping vat.

Sheep are consistent money-makers for a large number of Kentucky farmers.

TON LITTERS and **KEEPING RECORDS** on the cost of growing are Extension projects which aid the hog breeder to adopt the most efficient methods of swine husbandry. **PROPER CUTTING** and **CURING PORK** are of considerable importance to the average farmer. Demonstrations in these projects have proven very valuable.



A ton litter from Pulaski County.

Meat cutting demonstration—Daviess County

Soybeans in corn for hogging.

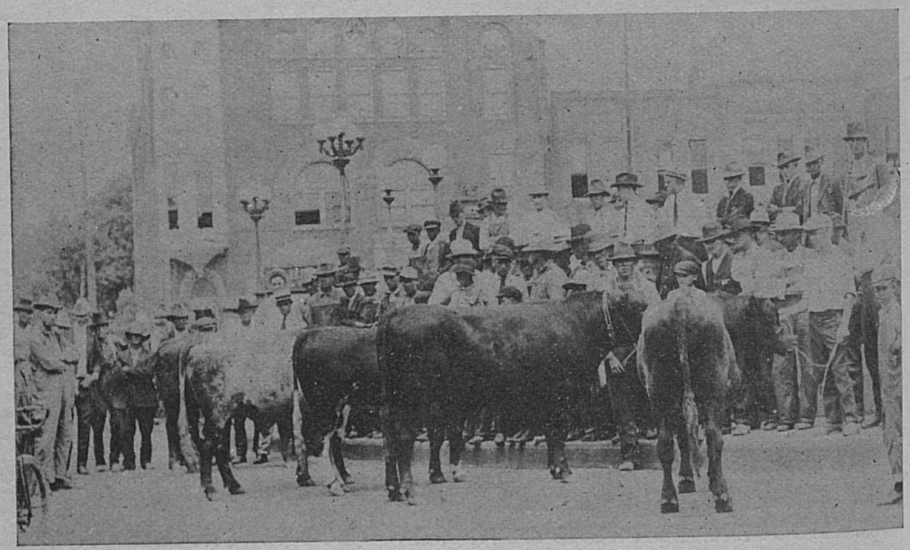
Hogging down corn and soybeans has increased rapidly during the past few years, especially in counties well adapted to hog raising. The following is a partial list of Extension projects in swine husbandry:

A. WORM CONTROL.
B. SPRAYING FOR LICE.
C. HOUSING DEMONSTRATIONS (BOTH SINGLE AND COLONY TYPE).
D. FEEDING (ON PASTURE AND IN DRY LOT).
E. CUTTING AND CURING PORK.
F. TON-LITTER CONTEST.
G. USE OF PUREBREDS VS. GRADES.
H. SWINE MANAGEMENT.

CATTLE FEEDING and the use of **PUREBRED SIRES** are also important Extension projects.

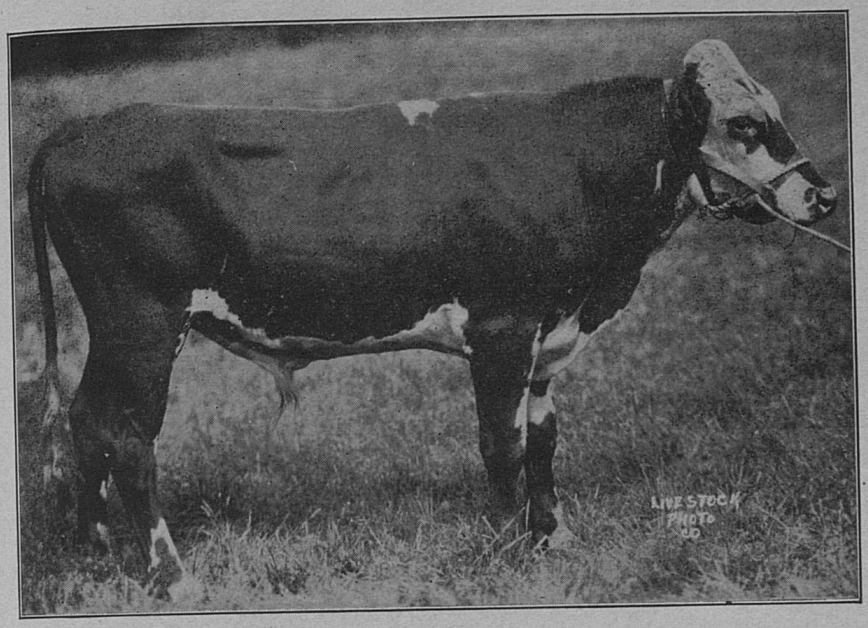
Cattle feeders tour Fayette County. Farmers are here studying methods followed in a successful cattle feeding demonstration.

"Scrub bull trials," auction sales, and campaigns to "sell the scrub" have been very effective in getting rid of inferior breeding stock in a number of counties.



These sires were purchased by farmers of one county at a cooperative bull sale.

KENTUCKY HAS RISEN FROM 48TH PLACE TO 1ST PLACE IN NUMBER OF FARMERS ENROLLED IN THE UNITED STATES PUREBRED SIRES LEAGUE DURING THE PAST SIX YEARS.



A scrub bull.

THE ABOVE TYPE of animal is an **EXPENSIVE LUXURY.** Replacing the scrub with a purebred such as the one shown below means an improvement in livestock for years to come.

Purebred Bull

FARM MANAGEMENT is one of the biggest tasks for both farmer and County Agent. The net result of the year's work determines pretty largely how fast the farmer, the farm and the community can go forward. The application of modern business methods is just as necessary and important to the farmer as to the merchant. Keeping books is the first step in putting the farm on a paying basis.

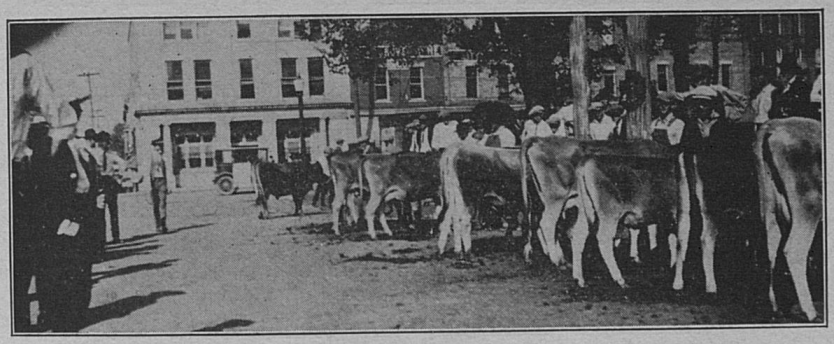
During the trying times of 1921 and 1922 a few farmers managed their farms so efficiently that they realized interest on their investment and also a reasonable labor income. A tour of such farms by groups of farmers such as shown in the illustration on this page at which the successful methods of farm practice are shown in detail is one of the most valuable ways of learning good farming.

A group of farmers on a farm management tour in Mason County.

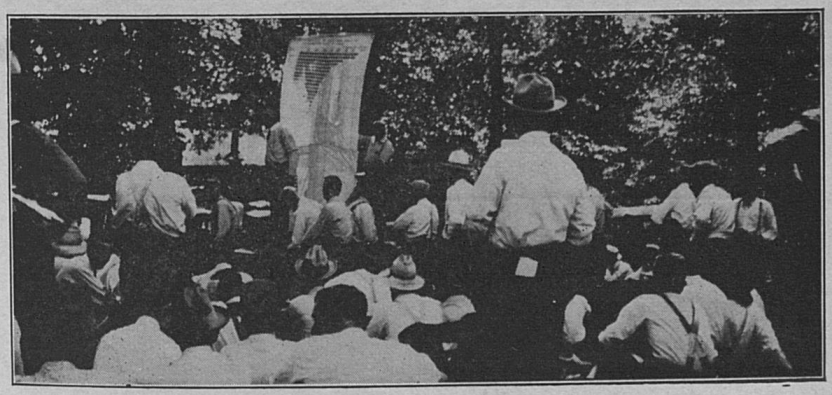
Several groups of farmers in Union, Larue, Mason, Washington and Nelson counties are making use of the County Agent's knowledge of farm management.

COMMUNITY FAIRS, ROAD BUILDING, BEAUTIFYING THE HOUSE YARD, BOYS AND GIRLS CAMPS AND FARMERS GET-TOGETHER MEETINGS FORM PART OF THE PROGRAM IN MANY COUNTIES.

Lee County road working day.



A Jersey exhibit at one of the many fall fairs.



An outdoor field meeting to discuss clover and limestone.

Summary

THE COUNTY AGENT:

Carries scientific information from the Agricultural Colleges and Experiment Stations to the farm, and demonstrates methods of putting such information to practical use.

Is a trained agricultural leader located at the county seat and available to any farmer wanting his services.

Employed for the purpose of "helping the farmer to help himself" and solve the many practical problems confronting the farmer on every hand.

Conducts demonstrations in soil building, growing crops, feeding and managing livestock, grading and marketing farm products, planning farm buildings and beautifying the farm home.

Writes news items for the local newspaper, giving information on timely farm subjects.

Trains farm boys and girls in methods of growing livestock and crops, teaches them cooperation and care of health, and instills into their lives a love, admiration and respect for the farm.

Conducts farm meetings, farm tours, and Extension schools in agriculture.

Encourages community and county shows and exhibits of farm products.

Shows motion pictures, lantern slides and does many other tasks of an educational nature.

Talk to your neighbor, banker, preacher, and county judge about a County Agent for your county or write the Extension Division, College of Agriculture, Lexington, for further information.