

# DAIRY HUSBANDRY AT THE U. OF A.

By R. B. TRUBEY, '25

**Recent Addition of New Bulls of Remarkable Record and Bloodline to the University of Arizona Dairy Herd Should Eventually Prove Quite an Asset to the Scientific Development of the Dairy Industry in the State.**

In order to give practical instruction to students in dairy husbandry, and for the purpose of carrying on experimental work and scientific investigation for the benefit of the dairy industry, the College of Agriculture of the University of Arizona maintains a dairy herd at the University Farm. At present the herd consists of Holsteins and Jerseys.

Later, when the development of Guernseys and Ayrshires in the state is sufficient to justify it, the management expects to add small herds of these breeds to the present unit.

W. S. Cunningham, Professor of Dairy Husbandry has charge of the dairy husbandry work at the U. of A. He has conducted this work for a number of years and has become thoroughly acquainted with the numerous problems connected with it, which come up for solution from time to time.

To know each cow by name, and keep in mind the characteristics peculiar to each, would be a formidable task for one not trained in such work, but the Prof. has the "dope" on all of them and can tell how each one ranks in efficiency of production.

It is the policy of the management to keep only a small herd of each breed and to select the best individuals and breed up the herd so as to obtain individuals of the best type, which are high producers of milk and butter fat.

Male calves which are likely to make good sires are sold to Arizona dairymen. An effort is made to place them with breeders who will give them an opportunity to demonstrate their value. Inferior male calves are vealed.

The Jersey herd carries considerable of the blood of Noble of Oakland and of Sophie Tormentor. At present there are ten Jersey cows giving milk. Three Jersey heifers will freshen in the next three months.

There are ten Holsteins of milking age, three of which are dry. Two of these will calve in January. One Holstein heifer will also calve in January.

The dairy is not conducted as a commercial proposition, and it will not



IDAHO MATADOR CONQUEROR NO. 384967. A NEW ADDITION TO THE UNIVERSITY OF ARIZONA DAIRY HERD.

be possible to determine the profits derived from the operations till the results are evident. In the case of breeding experiments it is necessary, in most cases, to wait several years in order to determine whether a particular plan is wise or not.

The dairy barn on the University Farm is an up to date structure with room for thirty cows. The floor and mangers are made of concrete. Plenty of screened windows are provided for ventilation.

The cows are only kept in the barn during milking time, and the floor is scrubbed and washed after each milking. A milking machine is used and the milk is handled in a sanitary manner from the time it is drawn until it is delivered for consumption. Most of the milk is sold to the Dining Hall on the University Campus.

At certain times during the school year, the milk is used in the manufacture of butter and cheese by student who take courses in the manufacture of dairy products.

Some very good records have been made by cows of both breeds in the herd. At the age of six years and six months, Theresa Belle De Vries, a Holstein, was put on test, and gave 20,077 pounds of milk containing

589.57 pounds of butter fat in 305 days. Theresa Belle 3rd was put on test at the age of seven years and one month, and produced 26,320 pounds of milk containing 812.14 pounds of butter fat in 365 days. Miss Pell Pietertje, another Holstein, at the age of seven years and six months produced 19,002 pounds of milk and 648.72 pounds of butter fat in 305 days.

Among the Jerseys, Arizona Gipsy Draconis holds the highest record of production. She was put on test at the age of four years and seven months and produced 11,190 pounds of milk containing 585.29 pounds of butter fat in 346 days. Arizona's Butter Girl produced more butter in less milk, but required more time. Her record was 10,376 pounds of milk and 596.4 pounds of butter in 365 days, at the age of five years and eight months.

Childeberte, an aged Jersey cow, was put on test at twelve years and nine months of age and produced 8,275 pounds of milk and 475.83 pounds of butter fat in 365 days.

The cows are fed a ration which is calculated to produce the maximum amount of milk and butter fat which can be obtained economically. In

(Continued on Page 15.)

## DAIRY HUSBANDRY AT THE UNIVERSITY OF ARIZONA

Continued from Page 4

determining the rations for the individual cows the cost of feeds and the productive ability of the cows must be considered.

In all cases an effort is made to feed young cows so as to develop their productive ability, so that an estimate of their value may be obtained without unnecessary delay.

Alfalfa, barley or sweet clover pasture is provided during as much of the year as is practicable. Corn silage, or grain sorghum silage, is provided for the milk cows during most of the year. The cows are fed as much good quality alfalfa hay as they will clean up well.

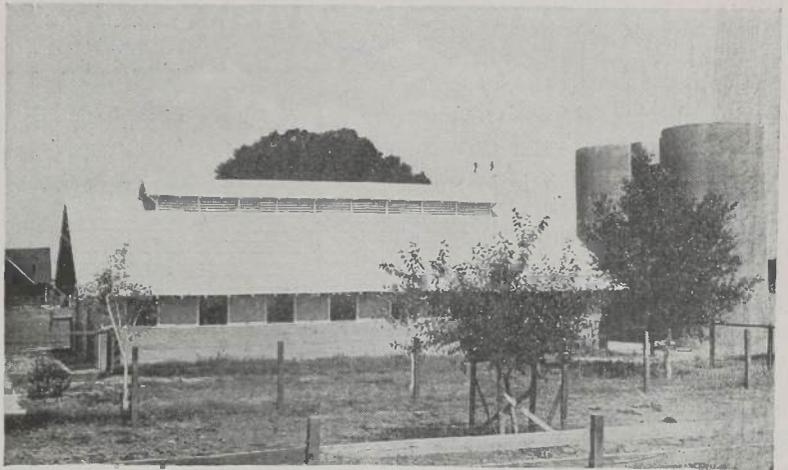
The grain mixture which is fed to the milk cows is composed of the following ingredients: five parts of wheat bran, five parts of ground corn, five parts of ground oats, five parts of rolled barley, three parts of cotton seed meal, and one part of linseed meal.

When the price of any ingredient is too high, the proportions are arranged so as to keep the feed upon an economic basis. This means that the proportions of the different ingredients are varied according to their market price.

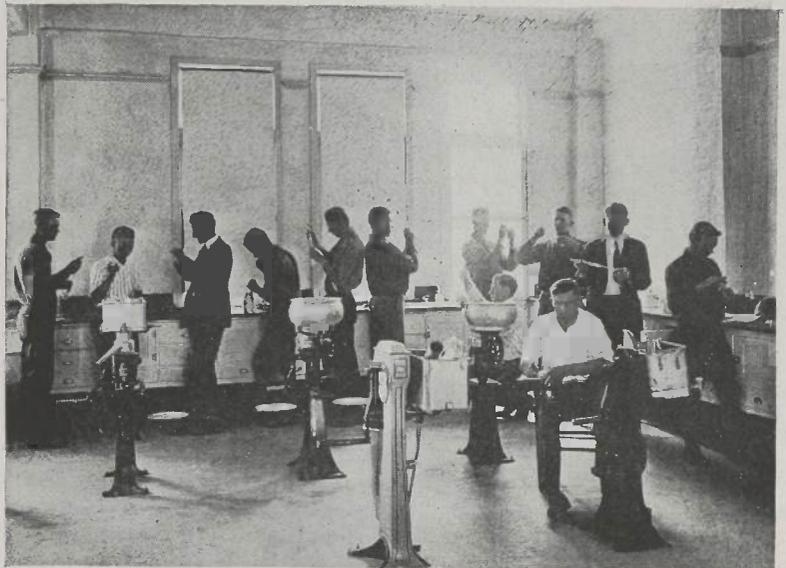
In 1923 it became necessary to obtain a new Holstein bull. The one which had been used for about two years prior to this time sired about 80% bull calves, so that the herd could not be increased any longer by using him.

Through the efforts of Prof. Cunningham, and with the hearty cooperation of Dean J. J. Thornber of the College of Agriculture, a desirable bull was located and purchased. This bull, Idaho Matador Conqueror No. 384967, whose picture is shown on page 4, was purchased from the Idaho Agricultural College when he was twenty-two months old. He was delivered here in November, 1923, and so far has given a good account of himself.

The characteristics of his offspring show that he is prepotent to a marked degree. He is line bred to Matador Segis Walker, one of the most famous herd bulls of the Carnation Stock Farms of Seattle, Washington. He was sired by Matador Violet Idaho, whose dam made a record of 1259 pounds of butter in one year. Idaho



THE DAIRY BARN AND SILOS.



STUDENTS TESTING MILK IN THE DAIRY LABORATORY.

Segis Ormsby Girl, his dame, made a record of 1019 pounds of butter in 365 days.

Idaho Matador Conqueror is mostly white, and has good constitution and quality. From the standpoint of popular blood lines, production in his pedigree, type of his sire and dam, and his own individuality, he is a good individual. Now, at the age of two years and eleven months, he weighs about 1900 pounds, and more than half of his get are heifers.

The most recent addition to the U. of A. dairy herd is a young Jersey bull, Ruth's Sybil's Gamboge No. 232678, born June 10, 1923. This bull was purchased from the Hartman Stock Farms of Columbus, Ohio. He

was delivered to the U. of A. Farm on Dec. 22.

Sybil's Gamboge of Whitehall No. 170,426, the sire of this animal was born Jan. 1, 1918. He won first prize as Senior Bull at the Tristate Fair in Memphis, in 1919. His get won first prize at Indiana State Fair and second prize at Ohio State Fair in 1921. Gamboge's Ruth of H. S. F. No. 379066, the dame of this animal, has a record of 11816 pounds of milk and 646.43 pounds of butter fat in 365 days.

Judging from his pedigree and his quality and constitution, this bull should also be quite an asset to the University dairy herd, and thus to the State.