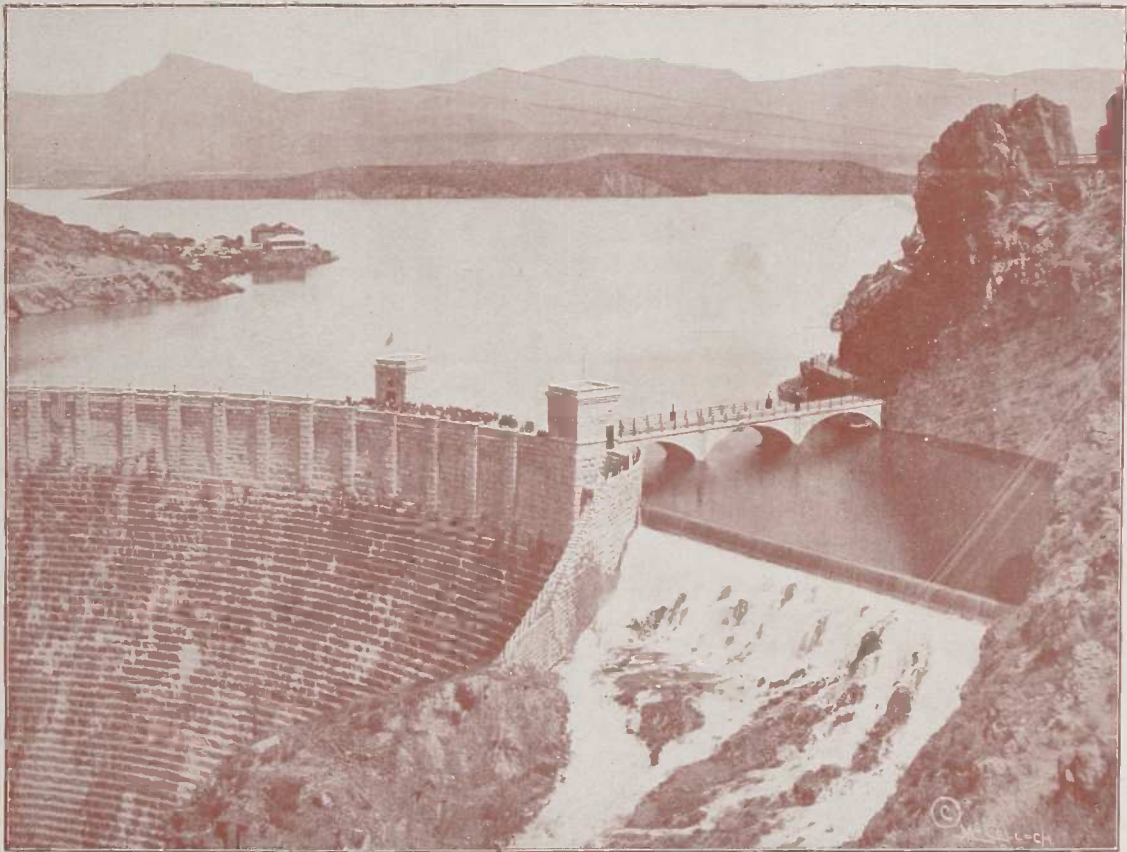


THE ARIZONA AGRICULTURIST

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SALT RIVER VALLEY EDITION



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THE new year lies ahead. Snow glistens like a blanket on the fields, and underneath lie the secrets of next summer's harvests. In the spring, Nature will wake the life in the soil, but man will direct it. Nature's methods will be as they have been for ages, but man will harness them with methods that are ever newer, ever better.

The American farmer is always improving the things he has done. He goes on compounding farm science and knowledge, motor power and mechanical equipment, managing his farm-factory with greater ease and efficiency. The more he works with his brain, intelligently, the less he toils with his hands. His own muscle power is as limited as it was in Adam's time and the hand work of his hired hands is very, very costly. He puts the burden onto machines—broad-capacity, fast-working, cost-reducing, profit-making equipment and power. He is abreast with the best of men and he competes with the world. He forces the issue in farming and profit comes his way.

* * *

Changes in equipment and power have been coming fast of late years. Labor-saving methods and machines are giving wonderful advantages into the hands of the modern farmer—advantages of capacity and profit. The old reliable McCormick-Deering lines are listed here for your convenience, and among them are many recent developments. More than ever it is a certainty that "Good Equipment Makes a Good Farmer Better."

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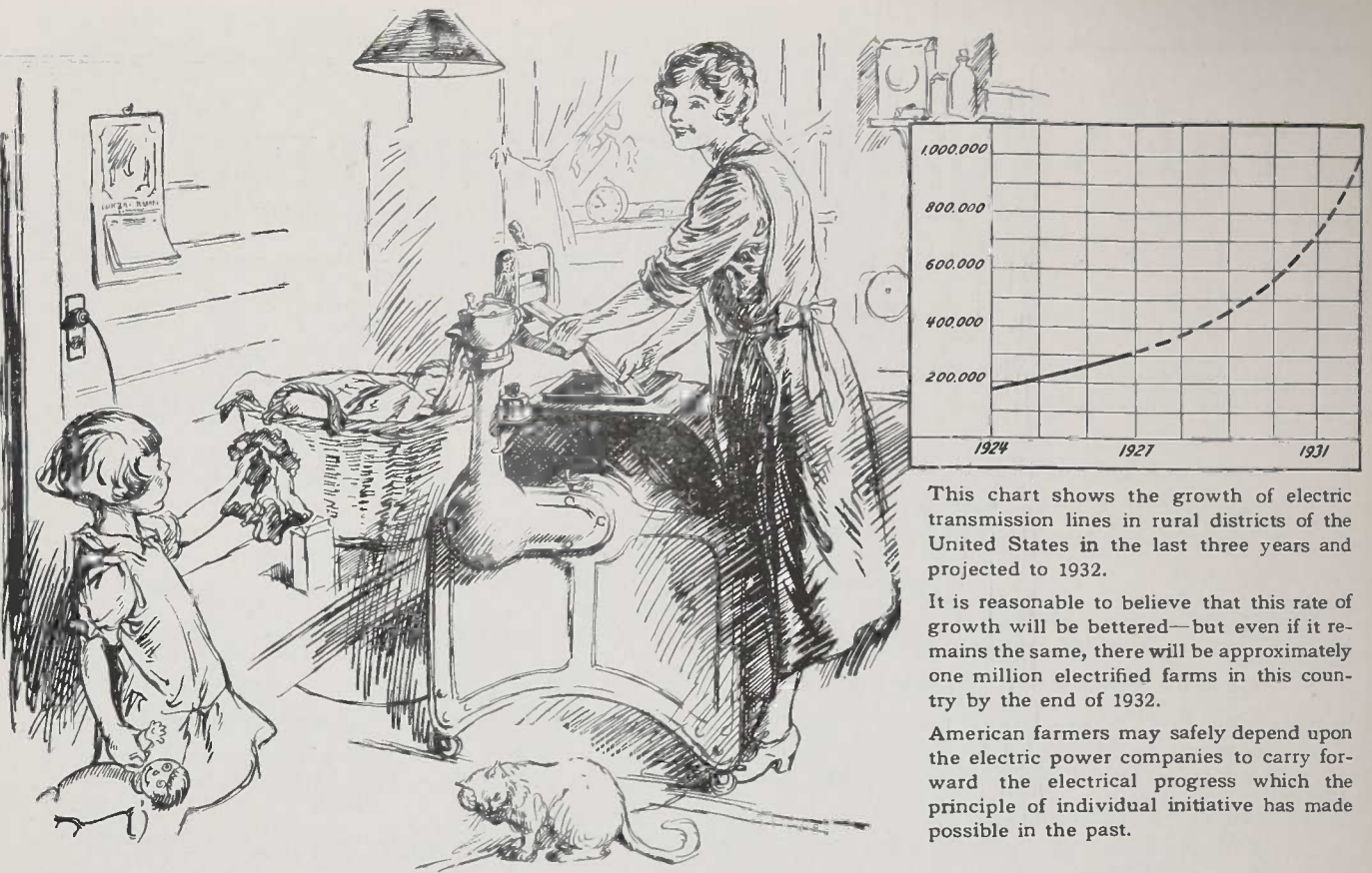
JANUARY, 1928

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Feeding Steers in the Salt River Valley



This chart shows the growth of electric transmission lines in rural districts of the United States in the last three years and projected to 1932.

It is reasonable to believe that this rate of growth will be bettered—but even if it remains the same, there will be approximately one million electrified farms in this country by the end of 1932.

American farmers may safely depend upon the electric power companies to carry forward the electrical progress which the principle of individual initiative has made possible in the past.

What ten cents worth of electricity will do on the farm

Ten cents spent for electricity, will perform any one of the following tasks:

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Electricity already provides more different kinds of service for agriculture than for any other industry. When so versatile a servant will work for such low wages, it is poor farm economy not to employ him.

* * *

To obtain electrical service for you and your neighbors, consult your power company. You will find ready cooperation. Many companies have established rural service departments to provide the latest information on the application of electricity to agriculture.

The Committee on Relation of Electricity to Agriculture is composed of economists and engineers representing the U. S. Departments of Agriculture, Commerce and the Interior, American Farm Bureau Federation, National Grange, American Society of Agricultural Engineers, Individual Plant Manufacturers, General Federation of Women's Clubs, American Home Economics Association, National Association of Farm Equipment Manufacturers, and the National Electric Light Association.

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ARIZONA AGRICULTURIST

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HUSBANDRY---THE ANCIENT AND HONORABLE SCIENCE

By Col. Dale Bumstead

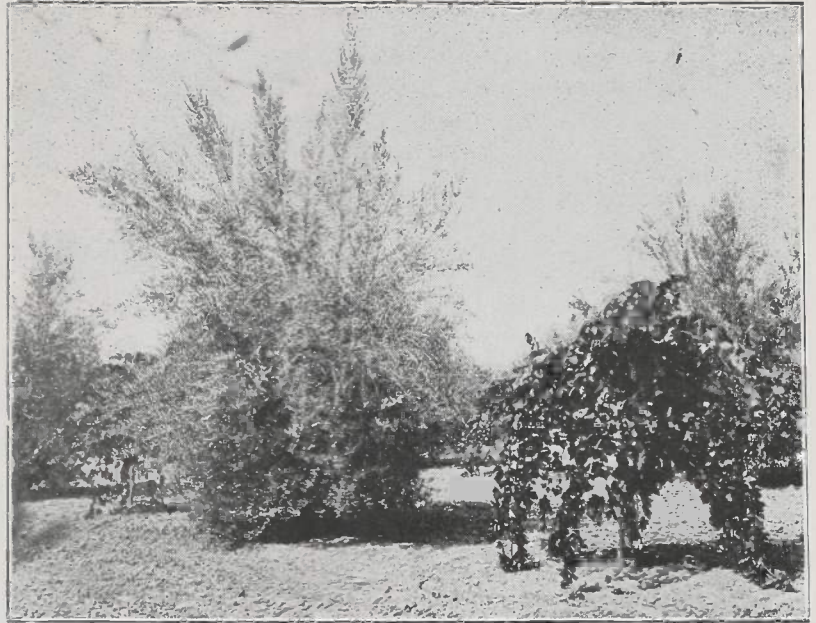
Points for the Modern Farmer Found in the Writings of the Ancient Greeks
And Romans; "The Profit of the Earth Is for All"

IN THIS material age the struggle for profit too often overshadows the desire for service and the joy in accomplishment. In the hurry and hustle we are prone to forget the glorious romance which lies back of us and fail altogether to visualize the radiant future which so surely lies ahead.

A Roman writer of the time of Tiberius said, "The Art of Husbandry is so necessary for the support of human life, and the comfortable subsistence and happiness of mankind have so great a dependence upon it, that the wisest men in all ages have ascribed its origin to God, as the Inventor and Ordainer of it; and the wisest and most civilized nations, who have best understood their true interest, have always endeavored to promote and improve it, and have never failed to acknowledge, and honor, as public benefactors, all such as contributed anything toward the same. * * * In proportion as either private families, or nations of men, fixed themselves in settled habitations, and applied themselves to this necessary art, they accordingly prospered, and increased in number and power * * *"

Greece counted husbandry "a most honorable employment, even not below Royal Majesty," and her great poet Homer "who knew the dignity, decency, importance, and value of things more than any man, in his beautiful description of Achilles' shield * * * represents the King standing in a furrow * * * overseeing the reapers * * * and greatly rejoicing in the fruits of his labors.

Rome for some time neglected this science—and little progress was made until they extended their dominion and came in contact with more highly civilized peoples when they came to a full realization of the importance of the industry, caused translations to be made of the 28 books on husbandry by Mago, a Carthaginian general, and these were followed shortly by a great many books on the subject in both Greek and Latin, and Rome's greatest generals, senators,



Grapes and Olives—The Most Highly Prized Fruits of the Old World

and philosophers became in very many instances farmers—and very good farmers, as the ancient writings bear witness to this day.

What is perhaps more surprising is the fact that, altogether aside from the great joy of looking back into the past, we can learn much to our advantage with reference to the actual details of farming from technical writings of nearly or quite two thousand years ago.

Take for example the matter of "bud selection" which is just now attracting so much attention to our very great advantage. We confess we thought the idea new—why it was old when Christ was born! Our horticultural leaders of today are but preaching doctrines well known to Virgil and practiced by the best horticulturists when Rome was at her prime.

It is doubtless true that some of our modern leaders have made important original discoveries, while others have performed even greater service by drawing attention forcefully to important fundamental facts long known by a limited few only;

but many of us could profit—for example—by reading the works of L. Junius Moderatus Columella, written at about the time Christ was born, and translated into English about 1745 A. D.

A trusting friend loaned me his copy of this translation—an honor I greatly appreciate—and I intend sharing with you some of the gems this work contains.

If Columella should come back and lecture on horticulture today our leaders in agriculture would attend and profit from his wisdom. True, some of his lectures would be just a bit obsolete—for example the ninth chapter of his first book: "Of What Size and Plight of Body, the slaves must be, which are to be assigned to every particular work." But there is a lecture in the same book entitled "Of such things as are principally to be considered, in viewing and examining land before it be bought." How much happier many would be today had they studied this lecture and acted upon his advice!

Then in the second book is a lecture
(Continued on Page 11)

POSSIBLE PROFITS FROM PERSIMMONS

By R. H. Hilgeman, '28

Southern Arizona Well Adapted to the Production of Persimmons; A Brief Discussion of Cultural Practices and Marketing

THE ancient Romans gave to the persimmon the name of Diospyros to signify that it was the bread of the Gods. Like many other Oriental fruits, however, it has been lost to the people of the temperate zone. Now, centuries later, the sub-tropical fruits are again coming into their rightful heritage which places them among the finest fruits the world has known. Southern Arizona may therefore consider itself fortunate to be among the few favored sections in the United States where such fruit can be grown.

The Japanese Persimmon is distinctly a sub-tropical fruit, the regions where it can be grown being limited to areas somewhat wider than that of the fig. It has been thought for some time that it was not adapted to the lower inland valleys of the Southwest, due to the high prevailing summer temperatures. However, recent experience has indicated that a high degree of atmospheric humidity is not necessary, and that the mature tree is capable of standing the heat of the summer if supplied with plenty of water. The soil requirements are not exacting, a deep, reasonably heavy, well drained soil produces the largest tree and the highest quality of fruit. However, satisfactory results are obtained on light sandy soils, high in organic matter.

The tree is variable in size and shape depending upon the variety and kind of stock used. The tree is a vigorous grower, unless of the dwarf type, sometimes attaining a height of 40 feet. Planting distances will therefore vary with the variety planted, 18 to 24 feet being the usual limits.

Cultural Practices

The land upon which persimmons are to be planted is often prepared in advance by plowing under a green manure crop. This assures the young trees the best conditions under which to start growth. However, this practice is not absolutely necessary except upon virgin land. The trees are planted in midwinter, January or February being the best time for Southern Arizona. The tops should each be cut back to about 18 inches and injured roots removed. Care should be taken in planting not to allow the roots to become dry. Irrigation soon after planting is also advisable.

During the first year, the tree should be protected from the sun by a burlap or palm leaf shade, placed on the south side and slightly over the tree. This prevents sunburn and protects the tree from hot dry winds to a degree. The persimmon needs careful and consistent irrigation, and should not be permitted to become dry at any time.

The trees blossom very heavily in the spring, the blossoms coming out on the new growth after it attains a length of six inches or so. In a short time the blossoms begin to fall and this self thinning continues for an indefinite period. This is the natural habit of the tree and usually results in the retention of all the fruit that the tree can bear and mature to the proper size. Dropping can be controlled to a degree by careful irrigations at critical periods when hot spells are likely to occur.

Nothing definite is known in pruning persimmons, but a few general rules should be observed. Moderate pruning is always best; a severe pruning is disastrous. The latter dwarfs trees and defers fruit bearing in young trees. Never stub, as stubbing changes the tree from fruit bearing to vegetative growth. Never cut off any leaf surface from young trees and later thin only.

Trees twenty-five years old are known, which have not yet been pruned and do not need to be. Some wood dies each year—nature's pruning, and this is removed, no other pruning being done.

The persimmon may fall into the habit of alternate bearing very easily. Pruning may be used to influence this but sufficient work has not been done on the subject to give definite proof. Careful irrigation and moderate pruning are thought to be the best methods of preventing the alternate bearing habit.

Among the outstanding varieties of persimmons for the Southwest are the Hachiya, Fuyu and Taninashi. In California the Hachiya has been found to be the most successful, and present plantings are being made almost exclusively to that variety. Without doubt this variety will be the best for Arizona as it is a vigorous grower, stands the heat well, and produces a large crop of high quality fruit.

Picking and Packing

In picking great care must be taken in handling the fruit. If clippers are used, the stems should be cut short to avoid punctures. Small picking sacks and containers are used to avoid all bruises to the fruit. In packing for storage only "hard ripe" perfect fruit should be used, everything doubtful being packed for immediate consumption. Fruit which shows any green should not be picked. Pack immediately after picking and place in storage.

Persimmons as they are taken from the tree, packed and sent to market are highly astringent and uneatable. They may be kept in this state for a considerable time to cover the holiday trade or may be ripened in a few days for eating. As the fruit ripens and becomes of a jelly-like consistency, the astringency disappears and they are then ready for use. Several methods are used to ripen the persimmon artificially, one of the most recent being the use of ethylene gas. Forty-eight hours exposure to the gas usually being sufficient to ripen the fruit.

The fruit can be marketed in standard lug boxes or in specially designed crates for shipping. Two standard packs have been selected by the California Growers' Association. The regular Los Angeles lug is used; fruit packing five by six is designated as grade A, fruit packing six by seven as grade B. Two layers are packed in a box with several thicknesses of paper between the layers. For shipping long distances a special box designed similar to an egg crate has been used successfully.

The problem of marketing the persimmon has given little trouble so far to the growers of the fruit, as the home market has absorbed the crop at a high price without difficulty. The national market may be said to be almost untouched at the present. There are millions of people in the United States who have never seen nor eaten the fruit. These people comprise a potential market which promises to be practically unlimited for years to come. The persimmon is at its best at the holiday season, when it has little competition from other fruit, and the people may be said to be in the mood to appreciate its fine flavor and high quality.

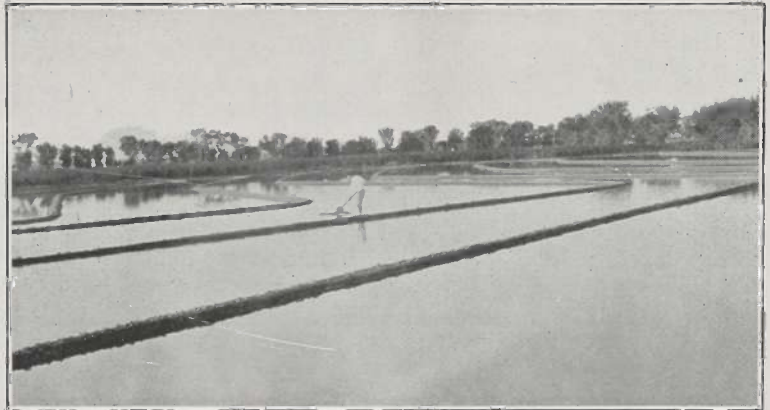
LEACHING OF ALKALINE SOILS IN MARICOPA COUNTY

By Harry A. Stewart, County Agricultural Agent

Causes of Alkaline Soils; Results of a Leaching System of Reclamation; Methods Employed in Leaching Alkaline Soils

ALKALINE soils in the Salt River Valley are similar to most other alkaline soils in the Southwest, though they carry a very small quantity of so-called black alkali. Like the arid regions where the annual rainfall is relatively small, there is a surface evaporation which naturally accumulates the salts on the surface foot of soil, therefore, in a number of the areas that are now being placed under cultivation are carrying, in some instances, a fairly large concentration of salts. However, the main difficulty which the project has confronted, has been the rise of the underground water table, caused by the underground strati being so placed that they have held the earlier irrigation water and not allowed it to pass out in the lower depths and below the root zone of plant growth. This difficulty, however, has been corrected, and the ground water table has been lowered in almost every instance, to a depth greater than eight feet, by the use of pumps. Another method of accumulation other than the original desert evaporation accumulation, and that caused by the rise of the underground water table which forces the evaporation and accumulates the salts on the surface, is the accumulation of salts where a high concentration of salty water is used, and only used in small quantities. Where ample amounts of this type of water have been used and the accumulation of salt kept below the root zone, no difficulties have occurred, but where only small quantities are used, especially where furrow irrigation is practiced, the difficulty may occur.

Since the underground table has been lowered to a good depth below the root zone, there remains the problem of placing the water on the land and washing out the salt accumulations. Where the entire field is considered uniformly bad, it is very important to contour the land so that the water may be ponded and held there for a long enough period of time to insure a good job of leaching. Where the land is spotted—that is, where there are two or three alkaline spots in a field representing an acre or more to the area—it is not a good policy to contour the entire field in order to



Leaching Alkaline Soils, Showing Method of Contouring

clean up these few spots. Much better results can be obtained by ponding the water on these areas and leaching the salts out. Where this spotted condition occurs and the entire area is contoured and water ponded on it, the penetration will be obtained in splendid shape where soil already is open and in good condition, while the water will not penetrate in the spots, for it finds a much easier outlet through the good type of soil. Before the water is placed on the soil for leaching, soil samples are taken and sent to the agricultural chemist of the University of Arizona for analysis. With this determination, the amount of accumulation is shown which gives an indication as to what results would likely be expected, that is, the approximate length of time that would be necessary to hold the water on the land. The samples should be taken from each foot section down to a depth of five or six feet. It is very important to know to what depth your water has penetrated and this can only be determined practically by the use of the soil auger. Penetration tests should be taken in several locations over the field and it is very desirable to find free moisture down to a depth of 10 or 12 feet. If this penetration is obtained, water should be held on the land for several days more, in order to insure a thorough job of leaching. Soil samples should be taken again after leaching, to insure results.

The majority of the pump water of this project carries a high concentration of calcium, which makes this water highly desirable for leaching. In a

few instances the calcium has been leached out of the soil by previous irrigation and a black alkaline (sodium hydroxide and sodium carbonate) condition has occurred. This chemical black alkali tends to seal up the soil and make it practically impervious to water penetration. Therefore, where calcium is in the irrigation water, it tends to displace the sodium and assists to break up the soil so that penetration may be brought about. Where calcium is not present in irrigation water, an application of gypsum is used to supply the calcium.

Many farmers in the Salt River Valley who have been carrying out a leaching program have brought their soils from an absolute non-productive condition within one fall or winter leaching, into the point of earning 8% income based on \$200.00 an acre, over and above water and taxes, by growing bermuda grass pasture. In a number of instances, the total soluble salts have run as high as 15,000 parts per million, and after 7 or 8 acre feet of water have been washed through the soil, they have reduced it to as low as 1000 parts, which is relatively a very low concentration and most any general crop will grow satisfactorily in such a soil concentration. The root system of the bermuda grass, in combination with the organic matter applied through the pasturing of livestock, tends to neutralize the remaining black alkali and to reclaim the land permanently; that is, if a good heavy irrigation is applied at least once a year to insure the washing down of all accumulated salts below the root zone.

ARIZONA AGRICULTURIST

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EDITORIAL

THE SALT RIVER VALLEY

THE SALT RIVER VALLEY is located in the central part of the state on the banks of the Salt River. The valley is 35 miles long and 12 to 23 miles wide, having an average elevation of 1100 feet above sea level. The land generally speaking is as level as a floor. The valley has clear sunshiny days, an average of 335 days a year. The annual rainfall rarely exceeds eight inches a year. The soil and subsoils have proven equal to the best in the United States as they are high in decomposed material containing lime, potash, and phosphoric acid, in large amounts. As the world's premier irrigation project is located here there is no need to worry from the effects of drought. The present irrigation project is the largest and most successful in America and a going institution with a bright future. The Water Users' Association has controlled the underground water table so that agriculture should be a permanent institution in the valley.

As is stated above there is no doubt but that the Salt River Valley is a land where sunshine, moisture and soil work together in the growing and assuring of bumper crops for the farmer. The methods and practices used in the valley are simple so that a farmer can adapt himself readily to raising crops under this irrigation system.

There are many cooperative marketing associations in the valley which include cotton, hay, citrus, and poultry products. Produce of the valley finds a ready market in the larger mining camps of Arizona and special crops are shipped to points out of

STARTING THE NEW YEAR

THE dawn of a new year is always a time for taking inventory of past achievements and future prospects. Looking forward to that which lies ahead is equally as important as reviewing the road left behind. The new year, therefore, should be a time for optimism and happiness. Intensified by the joy of the holiday spirit, new visions of the future are developed and the ideals of the past are strengthened.

Agriculture in Arizona looks forward to a brighter future this year than it has for many years in the past. During 1927 certain events occurred which point out that Arizona is on the threshold of an era of prosperity. The coming of large corporate interests into the state indicates that the country is waking up to the fact that Arizona enjoys certain advantages not found elsewhere.

However, the Arizona rancher must not be carried away by rosy predictions of the future. The successful man does not throw good sense aside and allow hope rather than judgment to dictate his policies. He must keep his head level and his vision clear if success is to crown his efforts. Therefore, the man who will look back on 1928 with the most satisfaction will be the one who has mixed good sense with the elixir of optimism in all his undertakings.

the state.

Phoenix, its center and capital of Arizona, is becoming a metropolis of the West. The Salt River Valley is now one of the fastest growing communities in the United States and should make great progress in the future.—L. C. T.

A NEW ERA IN FARMING

WE LIVE in a new agricultural age. The sooner we recognize this the better. Industry suffered equally with agriculture in deflation. Its recovery was rapid because of the facility with which industry can adapt itself to new conditions. The farmer has not yet grasped the cause of industry's recovery—the ability to organize. He does not comprehend that organization can do for him what it has done and is doing for industry.

It has been our proud boast in agriculture that we are individualistic and independent. These are fine characteristics. They are the attributes which inspired the courage and determination of the pioneers. We owe the development of the west to them. But a virtue has become a menace. Individualism threatens to weaken agriculture.

We live in a new era. If the farmer shall enjoy business success he must employ modern business methods. In short, he must organize. Co-operative marketing is the business answer to agriculture's business problem. If the farmer will organize around every farm product to market collectively instead of competitively, each with every other farmer, each will receive fair prices for every farm product.

The rehabilitation of agriculture requires: (1) The production individually of the necessities for maintenance of the farm home, and (2) co-operating in the merchandising of farm products.

As to the first, the farmer who buys nothing he is able to produce for

(Continued on Page 12)

THE UNIVERSITY DINING HALL

By Stella Mather, M.A.

Lunch Room Management Course Utilizes University Dining Hall as a Laboratory; Many New Devices Employed by the Dining Hall

ONE OF THE most popular courses in the Home Economics department of the University is the Lunch Room Management course, taught by Mrs. Katherine Moore, who has been the very capable dietitian and director of the dining hall for the past six years. Most fortunate are the senior girls who elected the course this fall, because it will not be offered again for two years, and for the reason that the dining room has been redecorated, new equipment added to the kitchen, and a large refrigeration plant installed, making the place an up-to-date laboratory equal to, or better than those found in many larger institutions which offer such courses.

Dining Hall Equipment

Pleasant surroundings have a dietetic value upon the diner and proper equipment adds to the efficiency of the ones who prepare the food. Faculty, students, and townspeople alike, are proud of the artistic improvements made in their dining room where more than 400 students assemble three times a day for seven days in the week.

Of particular value to the student, who is preparing herself to direct a like institution, is the knowledge of proper equipment. The \$5000 refrigeration plant which was added to the kitchen this summer is a splendid illustration of the amount of cold storage space required to run an institution of this size. Connected with the refrigerator is a large cooling room for vegetables and fruits. Ample storage space for large quantity buying makes possible greater variety at better prices.

A very worth-while device which reduces the otherwise necessary amount of hired help is the new "Buffalo" meat and vegetable chopper. In a few minutes one person can prepare, with the help of this machine, the diced fruits and vegetables for salads that would take hours of time if the work had to be done by hand. Of equal value is the machine in cutting meats, whether raw or cooked.

An efficient corps of workers in the kitchen is an essential to the success of any lunch room enterprise. Mrs. Moore, the dietitian and director, believes she has a staff which she can recommend to the girls, as possessing the necessary qualifications for work

of this sort. With Manuel, the chef, Anton, the baker, two cooks, four pantry women, and six general helpers, the big task of feeding the student body goes off like magic from the kitchen end. Thirty-five students earn their board and room by serving the meals in the attractive dining room.

Simplicity and beauty have been combined in redecorating and equipping the dining room. The floor has been covered with a linoleum of mottled gray background, with black design. A coat of wax is added from time to time to improve the wearing quality. The walls and furniture have been refinished in cream and gray. Bright cretonne curtain drapes, in soft shades of greens, lavenders, and orange, with gray background, made substantial with a lining of cream sat-teen, complete the color scheme of the dining room. New electric light fixtures with the direct-indirect system of lighting make the atmosphere of the evening as pleasant as that of the daytime. A special feature that appeals to the student body is the private dining room, where many of the school organizations hold their banquets.

The last, but not least, essential demanded by the public diner is satisfactory service. This is demonstrated to the members of the class through the efficient management of Miss Ruth Womack, the dining room assistant, and her student waiters.

Attractive Features of Course

What is it that makes the course so attractive to the members of the class other than the information secured which will prepare them for similar work? As expressed by some of them, the contrast in measures used in large quantity cookery—where one speaks in terms of gallons instead of cups, is an eye-opener as to the amount of food required to supply the demand of 400 hungry students daily. Figuring the costs of these meals and of each dish is another interesting feature of the work. For example, when a menu is given the girl and her problem is to hand in the cost of this particular meal, she must know her recipe first, and then, with pencil and paper in hand, a trip is made to the storeroom, where she makes out her order for a certain number of pounds or gallons of the

different food supplies necessary to meet the meal's requirement. An illustration of the amount of business done each month, Mrs. Moore states that the October receipts totaled \$10,000, all of which had to be most carefully budgeted to give back to the students wholesome meals, service, and needed equipment.

Planning the menus, decorations, and costs at so much per plate for banquets given from time to time is of practical value. The Home-Coming Banquet was a recent problem assigned to two members of the class. The most ambitious undertaking by the management this year was the Lindbergh banquet, given in October at \$5 per plate.

The theoretical feature of the course is but a small part of the requirements. Each girl must know, not only the business side, but the practical side as well. To this end she works with the chef and the baker, the salad maker, and in any other department in the kitchen where first-hand knowledge is a necessary qualification for any lunch room manager.

Trips to like institutions in the city are interesting and valuable features of the course. Such a trip was recently made by members of the class to the Desert Sanitarium. Here was an interesting demonstration of kitchen equipment, where tray service, rather than dining room, is required. Hotel dining rooms and kitchens, school cafeterias, and the tea room in the new Temple of Music and Art, are other interesting illustrations of types of lunch room management which may be taken up by girls trained for this work.

It is the rise in the common level of farming that brings progress. It is not what a few men do but what farmers as a whole do that determines the status of agriculture.

Probably no other single mistake causes so much loss to Americans, and especially American farmers, as does the loss of time.—G. F. Warren.

No one can afford to spend a dollar's worth of time to save half a dollar's worth of goods.

ARIZONA'S FIRST POULTRY JUDGING TEAM

By Lyle Young, '29

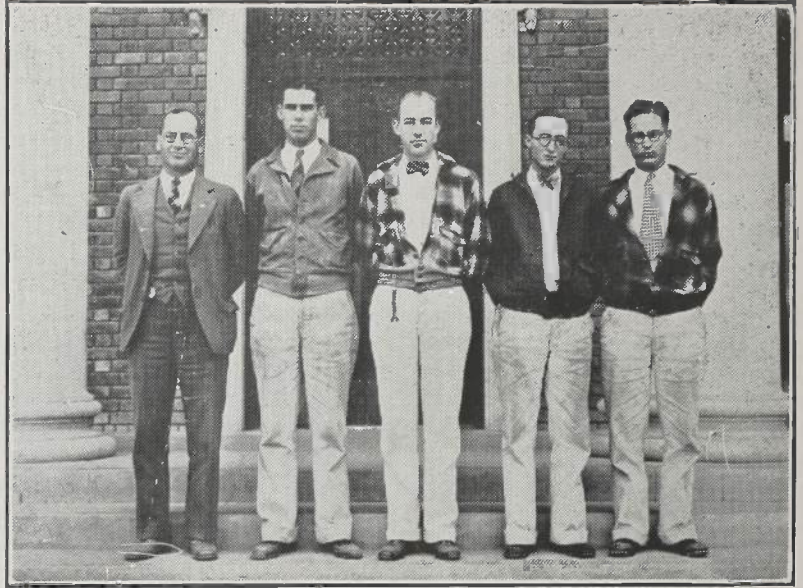
Team Takes Second in Whole Contest, First in Production Judging, Second In Exhibition Judging; Pearce Places Among Medal Winners

IF ANYONE had happened to be loitering around the S. P. depot in Tucson at 3 a. m. on the morning of November twenty-eighth, one might have seen four countrified looking youths following a middle-aged gentleman, who looked as if his sleep had been rudely disturbed, board an east-bound train. Well, if any of you were there you probably wondered who they might be, so here's the low-down on them.

That bunch was the Poultry Judging Team from the U. of A. going to Chicago to compete in the Intercollegiate Poultry Judging Contest held in the Coliseum. Now, in view of the fact that you might desire more specific information, here are their names: The sleepy looking gentleman in the lead was Prof. Harry Embleton, who coached the team, and, by the way, you will hunt a long time before finding as good a coach. The slightly bald fellow with the southern brogue was Leo Finch, and the tall, dark-haired, handsome chap following Finch was Charles Berkenkamp; the broad-shouldered, athletic-looking fellow with the permanent wave was Norman Pearce, and tagging along behind was the little, dried-up, skinny chap, called Lyle Young.

Now that you know who this bunch was, perhaps you would like to know something about how they happened to be going on this trip. Well, to start at the beginning, it all came about after a special Aggie Club meeting last fall, when it was unanimously decided to send a poultry team, to succeed the dairy team of last year. Of course, the main difficulty was in getting funds to finance the trip. The Club had on hand about two hundred dollars. This, of course, would not go very far, so they decided to ask some of the business men of Tucson and the Salt River Valley for donations. From the latter source around one hundred dollars was collected, making a total of seventy-three dollars to be given to each man on the team. The remaining expense was to be stood by the team.

Tryouts for the team started in September. These consisted of a trip to the Cochise county fair at Douglas, and another to the Arizona State Fair, besides work at the University Poultry plant, and last of all an exam-



The Poultry Judging Team: Coach Embleton, Charles Berkenkamp, Leo Finch, Lyle Young, and Norman Pearce.

ination on the Standard of Perfection. After these were summed up the team was picked. Ten men turned out, and the success of the team at Chicago was largely due to the keen competition put up by these men.

Now for some dope on their trip to this "Far Eastern City." They arrived there on Wednesday morning, December 1, and, after checking their luggage at the Y.M.C.A. hotel, went out to the International Livestock Show, spending the rest of the day there. The next morning, all the teams met at the Sherman Hotel, and were loaded into buses for a sight-seeing tour of the city. They first went to the Poultry Boards, where they watched the "high pressure" buying and selling. From there to an immense cold storage plant. This plant has three million cubic feet of cooling space and, at the present time, contains about \$15,000,000 worth of perishable goods. By this time it was noon, and they were taken to the Hamilton Club, where lunch was served. After lunch short speeches were made by Mr. Preebe and Mr. Killberne—the hosts of the day—and by Prof. Jimmie Rice, of Cornell. The remainder of the afternoon was spent at the Coliseum.

Friday was spent in the hotel, studying. Now comes Saturday, the big day. They arrived at the Coliseum

at 8 a. m., and were assigned numbers. Number 1 was to start on the judging and numbers 2 and 3 were to start the examination. The judging consisted of two classes, production and exhibition, of five pens each. The examination was a set of one hundred questions on the standard of perfection. Three hours were given for each of these events, so at 11 o'clock, No. 1 was started on the examination, and No. 2 on the judging, while No. 3 was turned loose until 2 p. m. The results were not learned until that night, at a banquet given in the Auditorium Hotel.

Say, folks, that banquet was great. Of course, everyone was on edge when they went in, but as soon as they were seated, the orchestra struck up a lively old-time tune, and the gang all joined in, singing, blowing horns, and, in general, making all the noise possible. After dinner the results of the contest were given. Arizona—the dark horse of the contest—walked up and picked off the cup in production judging, took second place in exhibition judging, eighth in examination and second in the entire contest! And this fellow Pearce took second in individual production judging, second in exhibition, and tied for second as high point individual. Thus giving him two medals and twenty dollars. Finch also made an enviable record.

(Continued on Page 12)

COOPERATIVE MARKETING

By Louis Groehler, President, Mesa Lettuce and Vegetable Growers

The Development and Aims of the Mesa Lettuce and Vegetable Growers; Methods of Selling; Factors Influencing Success

NO DOUBT all growers of lettuce, vegetables, and all perishable products have found marketing facilities and conditions very unsatisfactory at times. It seems that, in some instances in the past, the grower has received no consideration whatever. What his financial returns were at the end of the season depended entirely on a commission merchant who handled a large volume. A good share of the volume has meant an actual loss to the grower, but has still produced a profit for the handler because of the fact that part of it which sold at a low price, had to make up the deficiency of that which sold at a low price.

Aims of the Organization

This is one of the reasons for the birth of the Mesa Lettuce and Vegetable Growers. In starting this organization several things were in mind that could be accomplished. One of them was to sell the product at a fair price, and if the market did not afford a price that would at least pay operating expenses, to stop shipping. It is useless to ship a perishable product to a market that is fully supplied. This may be judged for oneself. What could be done if one had all of a perishable commodity that he could possibly consume and someone would keep on sending more?

Another aim of the organization was to obtain for the growers absolute control over the quality to be shipped, and to make every car as nearly uniform as it is possible to make it. One cannot have a car of any commodity fifty per cent of it good quality, and the other fifty per cent of it poor quality, and expect the good quality to sell the poor. It will do exactly the opposite. The entire car would very likely sell on the basis of the poor quality. The quality of the commodity should never be overrated or misrepresented to the buyer. Rather under-rate the quality than overrate it. In under-rating the quality the buyer will be agreeably surprised, and will know that he can depend on the grading. If it is overrated, however, he would be sorely disappointed and would hesitate to buy on your grading.

Methods of Selling

One of the biggest problems after the association was organized was to decide how to sell the produce. It

would cost money in any way that was chosen to handle it. The problem was studied from all angles and it was finally decided to sell through a firm which had a well established trade, a trade that demanded a quality product, and a trade that also was willing to pay a fair price for quality products and an assured supply. It was proven to our satisfaction that a wise selection had been made. Without giving the matter much consideration it would seem an easy matter to get a selling organization, but when it is gone into thoroughly, one will find that a good share of the organizations are depending on just a chance market. An average farm boy may make a wonderful success in selling of a commodity in the case of a shortage of it. But in case the market is well supplied, an old-established selling firm will always have the preference in supplying the trade, especially if they have dealt fairly with their buyers and have never overrated their products.

The organization might do its own selling, but in that event the buyer would be handicapped for the reason that the supply is only seasonable. He would always be confronted with the problem of getting his supply somewhere else when the season ended; also the seller may be handling only one or two commodities, whereas these buyers may handle everything in the line of fruits and all kinds of vegetables. It is the object of a selling organization such as was selected to keep its trade supplied with all these commodities throughout the year.

Factors Influencing Success

The above discussion has covered a portion of the marketing problems of the organization. No doubt it will be proper to say a few words in regard to the growing of the products and the personnel of the organization. In starting an organization of this kind it is well to consider who should be the members. The type of men needed are those who are willing not only to look for larger financial returns immediately, but men who are looking more to the future and are considering what can be accomplished by thorough co-operation. Men who are also willing to face certain problems and discuss them and try to work them out and really try to build a permanent organization.

There is one more thing that is vitally important in trying to grow quality products. One must have good fertile soil. No matter how sincere a man may be, with an impoverished soil he could not come up to the standards set by his association, and the heads of the organization should make it plain to all the members that, no matter how sincere or loyal they may be, they should not be allowed or encouraged to grow any of their products on soil that is not able to produce quality products.

Financing an organization of this kind will not be as hard a matter as it may seem if it is operated on a business-like basis and maintains a high standard at all times. This may be thought of as "co-operative selling," but it is not only that; it means co-operation of the buyer, the selling organization, the heads of the organization and every single grower. If they all co-operate, there is no reason why the organization will not be successful.

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POULTRY IN ARIZONA

By W. F. Fetterly, Superintendent Poultry Department, Arizona State Fair
 A Brief Review of the Arizona State Fair Poultry Show, Future Prospects
 For Poultry in Arizona

THE 1927 Arizona State Fair Poultry Show was by far the best that has ever been held in Arizona. It was larger and the quality was better than any poultry show held in the state before. There were 1607 head of poultry, rabbits, and pigeons on display consisting of 168 different varieties of poultry and rabbits. This is by far the greatest number of varieties ever seen at one time by the visitors at the fair.

Judge W. M. Wise, who placed the awards on the regular classes, stated that he was surprised that there were so many varieties and exhibits. He also stated that the birds were capable of winning at some of the largest poultry exhibitions held in the United States. Judge E. I. Hammond, who placed the ribbons on the turkeys, ducks, pigeons, and rabbits, said that he was highly pleased with the show as a whole. These men are both familiar with the largest exhibitions of this kind throughout the entire West. Judge Wise was for ten years manager of poultry breeding at the Michigan Agricultural College in Michigan. Judge Hammond has acted as show secretary of the California State Fair, the Southern California Fair at Riverside, and the great Los Angeles show for a number of years as well as judging some of the more prominent shows on the Pacific Coast. The poultry building at the Arizona

State Fair is entirely inadequate to take care of the ever increasing number of birds shown at this fair. It is only a matter of time when additional building space and cooping facilities will have to be provided to house this great display. Otherwise it will be necessary to limit the number of exhibitors to just what the building will take care of. It is hoped that this will not be necessary, however, as one can readily understand the disappointment of the numerous breeders of high class poultry and rabbits, who after going to the trouble of making preparations for the show have their entries returned for lack of space to house them. We sincerely hope that this will not be necessary, but it looks as though it will happen, possibly in 1928, unless larger quarters are provided.

The poultry industry in Arizona has certainly shown wonderful improvement in the last ten years, both in quantity and quality. However, there are still plenty of opportunities for those wishing to go into this business. Many cars of eggs and poultry products are imported each year to take care of the Arizona demand. This really should not be so, as the climate is ideal for poultry raising in most parts of the state. The egg laying contest at Tucson demonstrates conclusively that hens will produce as well in Arizona as any place on

earth and much better than most other sections. The mild winters make early hatching preferable, and the early hatched chicks are the money-makers the following fall and winter. Then too the early hatched fryers bring much better prices than those hatched in April, May, and June.

My advice to all poultry breeders is to get the best stock obtainable, take good care of the stock, giving them proper feeds, plenty of pure, fresh water, and an abundance of greens. The birds should also be kept free from parasites and vermin. Show your birds for the sport and advertising value and you will make a success of the poultry business.

Wife (disguising her voice): "Guess who this is?"

Husband: "Is it—ah—Phyllis?"

Wife (furiously): "Phyllis!"

Husband (disguising his voice): "Guess who this is?"

He: "I'm going to kiss you every time a star falls."

She (ten minutes later): "You must be counting the lightning bugs."

Mint leaves added to a molded or frozen salad give an unusual flavor. Small leaves of mint are used as garnishes.

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HUSBANDRY--THE ANCIENT AND HONORABLE SCIENCE

(Continued from Page 3)

ture, "That the earth neither grows old, nor wears out, if it be dunged." Get that idea across and you will make this nation so productive we can feed the whole world!

Here is another lecture that goes home: "That a vineyard newly planted will speedily decay and perish if it is not supported by great and assiduous culture."

And to come to the argument in favor of plant and bud selection. In order that the quantity and quality may be improved whole chapters have been written. "If any man therefore would, for several vintages, observe and mark such vines, as I told you I had in my possession a little while ago, that from them he might chuse the most fertile cuttings, he might raise vineyards equally generous and abundant in fruit; for there is no manner of doubt, but it was the will and pleasure of Nature itself, that the offspring should be like the mother. Hence it is, that the shepherd also in the Bucolics says (5): 'I've known the puppy, and the wanton kid, Each like its dam grown up.'

"And hence it is that they, who are fond of contending for the mastery in the sacred games, keep, with great diligence and care, the breed of the swiftest horses, and conceive hopes of future victories from the offspring, which has been propogated by a generous stud. Let us also, for like reason * * * found all our hopes of future vintages in chusing * * * of the most fruitful vine."

The author points out the rapidity with which a very superior plant can be multiplied.

"But when once the fruitfulness of the vine has been sufficiently proved, it is very quickly raised to a very great number by engraftments. Of this thing, you, Publius, Silvinus, can give evidence for us, seeing you will very well remember that I completely finished the planting of two jugera (one jugerum equals 27849.30 English sq. ft.) of vineyard in less than two years time, by making engraftments from one early ripe vine, belonging to you in your Ceretanian Estate. What number of vines therefore do you think might be planted within the like space of time from the cuttings and shoots of two jugera, when these two jugera themselves are the offspring of one vine?"

"* * * Wherefore, I judge it absolutely necessary, that, in chusing

of plants, we take care to gather * * * those fruit bearing shoots, which by bearing plenty of fruit already, promise fecundity for the time to come—nor let us content ourselves with single clusters, but let us approve those most which, we see, have the most numerous offspring. Shall we not commend that shepherd, who propagates an offspring from that mother which brought forth twins? And a goat herd who preserves and sets apart for breeding the young of those cattle, which are commended for bringing three at a birth? for it is certainly true, that the offspring will almost constantly answer to the fecundity of the parents. And let us follow this same method in vines."

But enough of the ancients—Shamel, Pomeroy, and others have been selecting citrus buds and breeding them—generation after generation—with an improvement each time, until the product of a single tree is worth more than the product of many ordinary trees. All manner of improvement has resulted from careful plant selection and breeding and if you want some of the "Profit of the Earth" you will do well to plant and breed only the very best. And, if I may presume to preach a little, do not undertake more than you can do well. There is profit in exceptionally good oranges, grape fruit, hogs, cabbages, dates, flowers, or cattle! Do well whatever you do and you will get your share of the "Profit of the Earth" that is for all.

ORVILLE KNOX ATTENDS ALPHA ZETA CONCLAVE

Alpha Zeta held its 30th anniversary conclave in New Orleans at the St. Charles hotel December 29, 30, and 31. Delegates from every chapter, the members of the high council, and alumni, including the founders of the fraternity, were present at the conclave. It was a get together

of students, agriculturally inclined, to better the fraternity which was founded for the advancement of scientific agriculture. The Arizona chapter, the youngest of the 36 chapters sent Orville Knox as delegate to the convention. Orville Knox reports it was the biggest conclave held in the history of the fraternity. Every minute of the three day schedule was filled with business or entertainment, and everyone enjoyed the conclave and their stay in New Orleans to the limit.



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**ARIZONA'S FIRST POULTRY
JUDGING TEAM**

(Continued from Page 8)

taking fourth in production judging, tenth in exhibition, and tied for fourth place as high point individual. The latter giving him ten dollars. Young wasn't far behind, being eleventh in high point individuals.

The team ratings were:

1. Ill.	2961
2. Ariz.	2940
3. Purdue	2868
4. Texas	2858
5. Ames	2855
6. Okla.	2834
7. Mo.	2803
8. Kansas	2765
9. Ohio	2750
10. North Dakota	2665

The ten high individuals were as follows. (Perfect score 1333.)

1. Ill.	1040
2. Texas	1025
3. Arizona	1010
4. Purdue	1010
5. Arizona	1008
6. Ames	1003
7. Kansas	996
8. Ohio	986
9. Purdue	978
10. Okla.	978

At 6 p. m., December 4, the team entrained for home, and arrived here in due time.

* * *

This article is being written primarily to interest the incoming students of the College of Agriculture

to strive for a place on one of these teams. The value of these trips is difficult to estimate, as it gives you something apart from your classroom work, something that has more than a mere monetary value. The strain of competition, the meeting of men from other colleges, all is wonderful training for the college man.

The team wishes to extend their sincere thanks to the Aggie Club, to the Faculty of the College of Agriculture, and to the business men of Tucson and the Salt River Valley, who so cheerfully and loyally backed the team in making this trip a go.

A NEW ERA IN FARMING

(Continued from Page 6)

himself, cannot go broke. The surplus becomes a by-product produced at very low cost. Regard for home production requirements will reduce the cash crops and partly solve the surplus problem.

As to co-operative marketing, the farmer today cannot remain an individualist. Economic laws and business conditions are bound to dictate to him the character and quality of what he shall produce and how and when he shall produce these products. If he shall choose to disregard the production of others, if he shall continue to offer his products in competition with the products of other growers, he must pay the penalty. That road leads to economic disaster.—Merton L. Long, The Agricultural Review.

A STADIUM FOR ARIZONA

EVERYONE who has been connected with Arizona for the last few years has realized that the existing facilities for athletics has been inadequate. Arizona's teams have been handicapped by a lack of

space upon which to practice. Also, the attendance at the games has not been large because of the condition of the seating accommodations.

Athletics are recognized as the dominant force in molding real college spirit. Arizona has often been criticised as lacking in that spirit. A football season in a real stadium will go a long way toward putting over such a spirit and showing the world what Arizona can do. Let's get behind the stadium and put it over.

**AGGIE CLUB WELCOMES
POULTRY TEAM**

Students of the Aggie Club met in room 204 of the Agriculture building on December 8, 1927. The main purpose of the meeting was to welcome the students who had won high honors in the poultry judging contest at Chicago. Each of the team gave an interesting talk on different phases of the trip and expressed their appreciation for the financial help of the Aggie club.

Professor Embleton told how different teams placed in the contest. The outcome of the contest was not known, he said, until after the banquet gathering of all the teams. Arizona placed first in production, second in exhibition, and eighth in examination, and second in the contest as a whole.

Members of the Aggie club are making advance plans for prospective ways of securing funds to send a judging team a year from now. Future plans for the next Aggie dance were also considered at the meeting.

**AMERICAN HENS LAY
760 EGGS PER SECOND**

Dr. J. R. Mohler, chief of the Bureau of Animal Husbandry of the U. S. Department of Agriculture, recently called attention to the importance of the poultry industry of the United States. He pointed out that while it is the most important poultry raising country in the world, the United States is also furnishing more than one-third of the world's output of eggs and meats. Collectively, the American hens laid at the rate of 760 per second, or two billion dozens a year. The baby chick business has now grown to an enormous proportion. Where it used to be only 50,000 chicks sold for the year, now it is at the rate of two million chicks a day. Last year's chick business amounted to 800,000,000 chicks.

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ALUMNI NOTES



MILTON E. SIMMS, '28

Roland S. Hamblin, a major in Agronomy, received his B.S. degree here in the spring of 1925, and that fall accepted a position as Agricultural Instructor at the Round Valley High School.

Hamblin is also a partner in a cattle ranch, which is located near Eager where feed is raised for the cattle. The winters are cold and the country is covered with snow much of the time, so feeding is necessary. He is putting his agricultural education into practical application on the ranch.

Mr. Hamblin took a judging team, made up of boys in his Agricultural class in high school, to the State Fair this last fall. He also is assistant manager of the county fair, which is held annually in the Round Valley High School. County fairs such as this create interest in agricultural work and act as an incentive to produce better crops.

David de la Fuente, '25, a major in Agronomy, came to Arizona as a transfer from Davis. He liked Arizona because the conditions here are more like conditions in his native country, and the courses taught here were more concerned with problems similar to those arising in his native finish.

Fuente had a fellowship here, and was working on his Master's degree, when he received word of the illness of his father. Because of this he had to leave before finishing his work. His father had wanted him to come home earlier than he did, so that he could run their ranch, but David wanted to finish.

At the present time Fuente is running his father's farm in Mexico. It is located in the state of Coahuila.

Socrates Balarazo, '26, a major in Agronomy, is employed at the present time by a large Peruvian cotton company. His brother owns an interest in this company, which has 11,000 acres in cotton this year. Fifty per cent of this is in Pima cotton, grown from seed which originally came from Arizona.

Balarazo is an assistant advisor in growing the cotton, his job being to look out for diseases, direct the work

toward the prevention and cure of disease, and see that proper cultivation is given.

Socrates studied this line of work in school and should be very good at it, for he is a man that makes his mark wherever he goes.

Lawrence Morris, a major in Poultry Husbandry, graduated with the class of 1925. After graduation Lawrence took up his duties as vocational Agricultural teacher at St. David High School. He held this position for two years. At the present time he has a fellowship in Poultry Husbandry at Texas A. and M. College, at College Station, Texas.

Mr. Morris was a basketball letterman at the university, and a charter member of Lambda Alpha (now Alpha Zeta).

Harry A. Stewart, a major in Animal Husbandry, he received his degree here in the spring of 1922. Immediately after graduation he began

work in the United States Veterans' Bureau.

From this position he accepted a position as County Agricultural Agent of Yavapai County. He then was located at Prescott. From here he was transferred to Maricopa County as County Agent, with headquarters at Phoenix. Maricopa county is one of the foremost agricultural counties in the United States.

While in school, Harry was known as "Cowboy Stewart," besides being about the best baseball pitcher Arizona ever produced; he also made a letter in football.

"Cowboy" married Anita Moeur, a graduate of Arizona also, and they are the proud parents of a boy, who is now one year old. Mr. and Mrs. Stewart live in Phoenix.

Associated with Mr. Stewart as assistant county agent, is another Arizona aggie student, Mr. Hubert Coulson.

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QUESTIONS AND ANSWERS

The Arizona Agriculturist has at its command the services of the Agricultural College of the University, and is anxious to serve its readers by answering any questions which come to its attention. Send your questions in to the Arizona Agriculturist, College

of Agriculture, University Station, Tucson, Arizona.

Q. For three years my black-berries have been loaded with blossoms, and they dry up without producing berries. Some say it is blight. The

entire neighborhood has been affected the same. Can you suggest a remedy?
—E. K. Veale.

A. It is quite likely that you and your neighbors are growing a variety of berry that is self-sterile and requires another variety to be grown with it to supply pollen. This is the case of the Haupt variety, which I know to be grown to some extent in the Salt River Valley. The MacDonald variety corresponds very closely to the Haupt in season and is recommended as a pollinizer for that variety. My suggestion would be to make a planting of the MacDonald variety adjacent to your present planting.

A. F. Kinnison,
Horticulturist.

The Test To Apply

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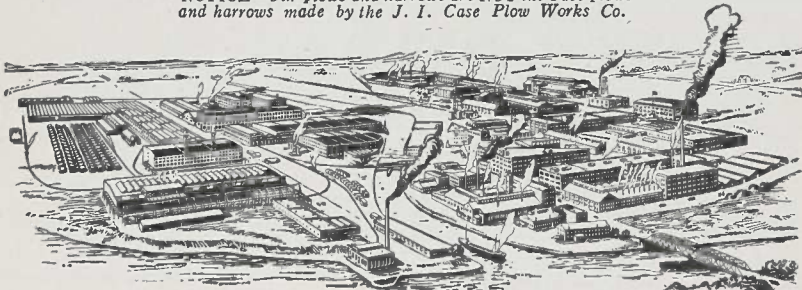
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Q. I have a dozen White Leghorns and often I get eggs that contain blood spots. I do not use these eggs. What is the cause of this condition? I have a neighbor who says to give oil of cedar to hens to keep off lice and mites and to make the hens lay. Is there any truth in this assertion?
—J. F. T.,

A. Rupture of a tiny blood vessel as the yolk is passing through the ovisac results in blood becoming mixed or imbedded in the yolk. This really does not injure the egg in any manner, although most people would condemn an egg that showed blood spots. There is nothing to the statement that oil of cedar fed to fowls will keep off insects, neither has it any value when fed to hens to make them lay.

H. B. Hinds,
Assistant Poultry Husbandman.

Q. I have a chicken two years old that opens its mouth a little every time it breathes. When breathing, it makes a gurgling sound. I always believed it was only the young chickens which had the gapes. Can you give me any information?—Mrs. C. A. H.

A. The trouble is infectious bronchitis. This is an infection of the bird's windpipe, as is implied in the name. The blood vessels rupture and the blood strangles the fowl, causing heavy breathing, gasping, and at times, a sharp sneezing effort to dislodge the clotted material. Unless attended to and relieved within a reasonably short time, death results. The mortality in some flocks has been as high as 50 per cent. Two drops of beachwood creasote in cod liver oil

has been used with fair success. A flock treatment of one ounce of equal parts of Ammonium Chloride and Ammonium Carbonate given in a wet mash for 25 birds is sometimes used. Probably one of the most successful remedies is to put into the windpipe of the fowl one drop of cresatin, a coal tar derivative with a phenol base. This causes the bird to choke for a moment and then cough out a stringy mass of blood. The throat and mouth are sprayed at the same time with cresatin, using an atomizer. These remedies are worth trying.

Harry Embleton,
Poultry Husbandman.

Q. I have 35 barred rock hens which I purchased about a year ago. They laid good at first, but have gradually gone off production. I feed equal parts of corn and wheat, all they will eat. Several hens have died on the roost. What is the trouble?—
J. F. H.

A. You are feeding a grain ration, which is too fattening. You should feed a good commercial laying mash. It should be fed dry in a hopper where the birds may have access to it at all times. Green feed is also necessary. The consumption of grain and mash should be approximately equal. Barred rocks are good producers when they get the proper attention.

Harry Embleton,
Poultry Husbandman.

**FAKE STOCK REMEDY IS
SOLD AGAIN, SAYS O A C**

O. A. C., Corvallis, Jan. 1. — The fake cure for contagious abortion in dairy cattle called "Bowman's Abortion Remedy," widely sold before being suppressed by the government as fraud in violation of the pure food and drug act, is again being offered for sale in unlabeled packages shipped from the "Bowman Laboratory and Milling Company," announces P. M. Brandt, head of the dairy department, and B. T. Sims, chief veterinarian here. The federal government is again investigating the concern and may reach it through the post office department, local officials have been notified.

No one has yet found a cure for this disease, though the local experiment station and others have made great strides in its control. About 18 manufacturers of "abortion remedies" have either been forced by the government to discontinue sales or to revise their labels.

Uncle Ab says the man who is careful as to how he spends his time and his money, has safe guides to success.

To mend a crack on the inside of a range, use a filling made of equal parts of wood ashes and common salt moistened with water. This will prove hard and lasting.

A dish of water placed in the oven while baking a cake will prevent the latter from scorching.

"My wife ran away with a man in my new car."
"Good heavens, not your new car?"

Passer-by: "Dear me, my good man, did you fall down the steps?"

Drunk: "Yeah, but it's all right, I was going down anyway."

"Politics makes strange bedfellows."

"Yes, they often rest on the same bunk."

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FALL FRESHENING IS GOOD

Fall-freshened cows should annually yield from 10 to 15 per cent more milk than those calving in the spring. When cows freshen in the fall, more of the work of milking comes in the winter when farm work is slack. More time can be given to raising the calves and less trouble will be experienced from scours than during the summer.

Fall-dropped calves are large enough by spring to make good use of pasture and are better able to stand hot weather. Under this system a large supply of skim milk is available for the young spring pigs.

HARD WORKER

Visitor—How long has that office boy worked for you?

Boss—About four hours.

Visitor—Four hours! Why I thought he had been here for a long time.

Boss—Oh, yes, he has been here for nine years.—Exchange.

Changed Places

The respondent was being examined in lunacy proceedings.

"Who was our first President?"

"Washington."

"Correct. Who was our second President?"

"John Adams."

Then there was a pause.

"He's doing well," whispered a friend of the lawyer. "Why don't you keep on?"

"I ain't sure who was the third President myself."

Magician (to small boy he has called on to stage)—Now, my boy, you have never seen me before, have you?

Small Boy—No, daddy.—Ex.

Doctor—Yes, Sam, you have quite a bad cough, but it will go away soon.

Sam—Ah knows dat, Doc, but what worries me is will Ah go with it?

Feed is expensive; why give it to scrub cattle?

EFFECT OF SUCCULENT FEEDS ON MILK

The U.S.D.A. conducted an experiment at Beltsville, Md., to determine the effects of several succulent feeds on the flavor and odor of milk. Cows were selected especially for this experiment and the rations were changed from one group to another to insure accuracy.

It was found that dry beet pulp soaked and fed wet to cows one hour before milking in quantities up to 30 lbs., green oats and peas, and carrots fed in the same way and up to the same quantity, produced only a slightly abnormal flavor and odor in milk. When fed after milking neither of these had any effect on flavor or odor. Pumpkins fed either before or after milking in quantities up to 30 lbs. had practically no effect. Sugar beets fed either before or after milking in quantities had no effect. Sugar beets fed either before or after milking in quantities had no effect on the flavor or odor.

Rape fed one hour before milking in quantities up to 30 lbs. produced a decidedly abnormal flavor and odor in milk. When fed after milking it had practically no effect. Kale fed like rape produced a very abnormal flavor. When fed immediately after milking it had practically no effect.

Soy beans fed in the same quantities had a tendency to improve the flavor and odor of milk. These results are stated in the official reports.

If food is scorched slightly, the taste can be removed by placing the vessel and its contents in a pan of cold water for a few minutes. This also loosens the food from the bottom of the pan.

To remove odors from the refrigerator or cupboard, fill a dish with boiling water and drop in a piece of charcoal. A piece of charcoal left in a closed bottle or jar will keep it from becoming musty.

She: "What are you thinking about?"
 He: "The same thing you are."
 She: "If you do I'll scream."

To have custard of an even, attractive brown when baked, sprinkle a little sugar over the top just before putting into the oven.

"Caught any fish yet, Roy?"
 "Nope, but I got one so tame that he's eaten off my hook."



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