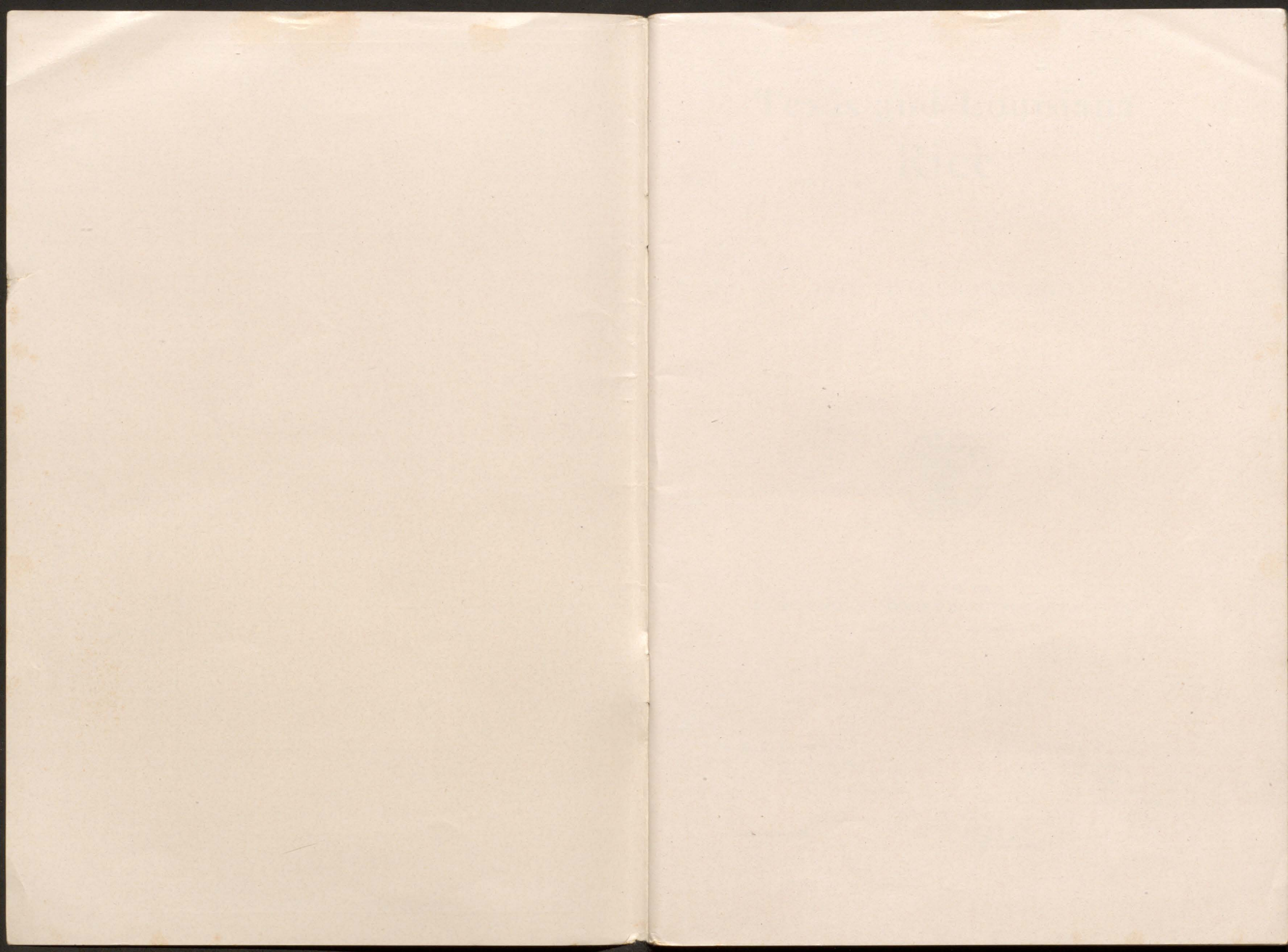


# TEXAS AND LOUISIANA RICE



ISSUED BY  
PASSENGER DEPARTMENT  
SUNSET ROUTE  
NEW ORLEANS—HOUSTON



# Texas and Louisiana Rice

HOW IT IS GROWN AND  
COOKED

CUMMING & SONS  
ART PRINTERS  
HOUSTON, TEXAS



COMPILED BY THE  
SUNSET ROUTE PASSENGER INDUSTRIAL DEPARTMENT  
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## PREFACE

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The wonderful development of the rice growing industry in Louisiana and Texas during the past ten years, and the recent rediscovery in this country of rice as the most healthful and nutritious of all foods calls for a revised edition of the famous Sunset Rice Book of Louisiana and Texas, copies of which have been distributed in all parts of the world since the first edition was issued some years ago. In this new edition unimportant matter contained in the old Rice Book has been eliminated and new facts and interesting information connected with rice growing, rice products and rice cooking introduced. In the preparation of this booklet the Sunset passenger industrial department is under obligations to the officials of the Rice Association of America and the Texas-Louisiana Rice Farmers' Association, for valuable suggestions and assistance rendered. Particular attention is called to the recipes for cooking rice, some of which are copied, by special permission of the president, from the celebrated "Creole Mammy Rice Recipes" issued by the Rice Association of America.

## RICE INDUSTRY IN LOUISIANA AND TEXAS

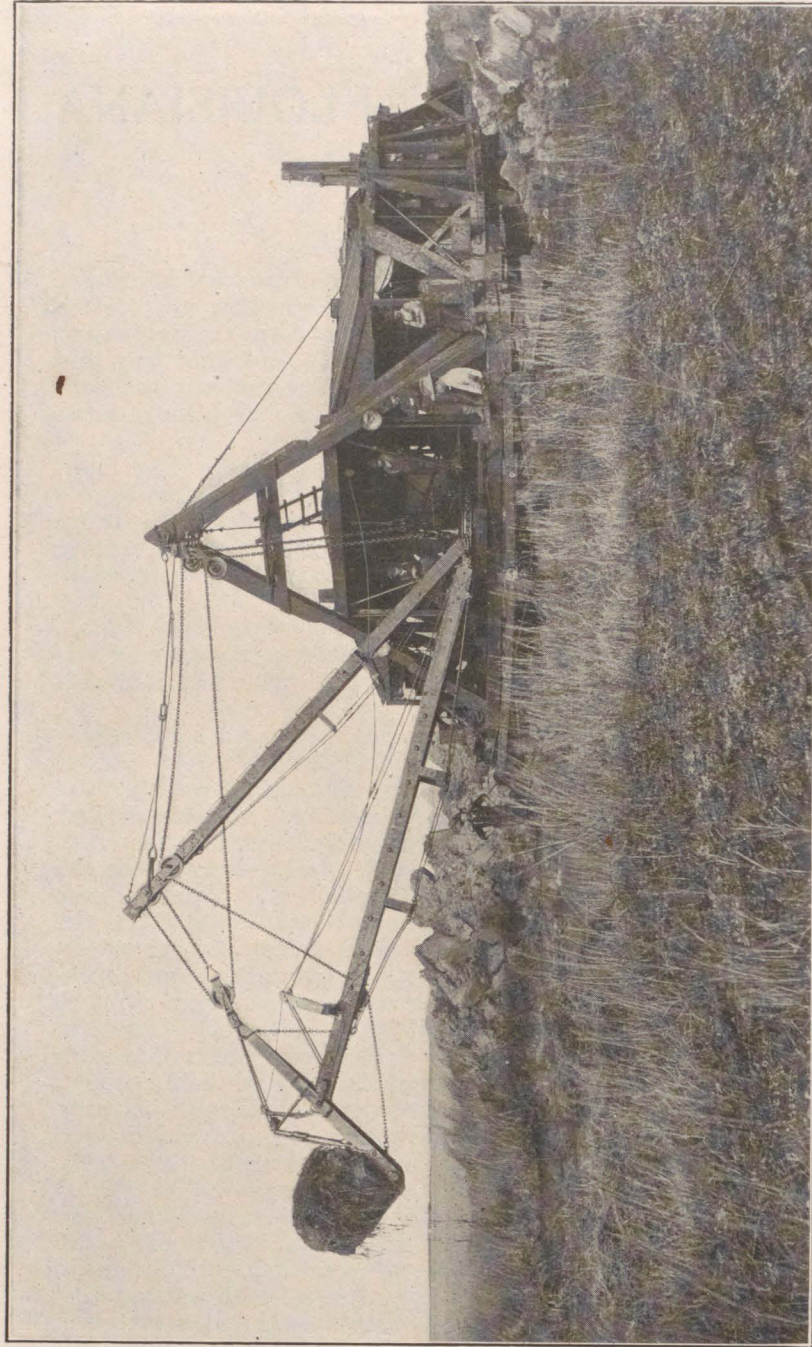
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**R**ICE IS KING in the coast countries of Texas and Louisiana. This greatest of all cereals is to this section what cotton is to other portions of the South, what corn is to Kansas and Nebraska, what wheat is to the Dakotas, and what hogs and corn are to Iowa. More than any other one thing, it has built up Southwest Louisiana and has almost taken the place of cattle in Southeast Texas.

The history of the rice industry in this section is an interesting one; starting from a small and uncertain beginning, and with few followers, the march of the great product has been one of triumph and success. It has had its difficulties, its defeats, its disasters; but all of these have been turned into victory until today it is a recognized monarch of the land.

Rice growing in this section dates back a number of years. In fact it may be said to have been raised by the natives ever since the earliest settlements, but in small quantities, sufficient only for the use of settlers.

Soon after the close of the war of the sixties, a small colony of Germans from New Orleans located in the southern part of St. Landry, now Acadia Parish, Louisiana, and it was by these people that rice was first raised for market. Portions of their farms were selected that were lowest, and a levee thrown up with a shovel to hold the water on the land. In this manner the rice patch got the benefit of the rain fall of the farm. When the crop began to ripen the levee was cut and the water allowed to run off. The rice was then harvested with sickles and carried together in small stacks. After it was thoroughly cured it was threshed out with flails. The grain was separated from the chaff by the winnowing process, sewed up in sacks and shipped to New Orleans, to be hulled, scoured, polished and fitted for consumption. Gradually the results of the labor of these Germans demonstrated that the raising of rice was a profitable industry, and the settlers in all parts of the parish were soon raising it in small fields. In the year 1887 the work was begun in earnest. New methods and culture and new and improved machinery were introduced, and the industry responded quickly to these new conditions and improvements. Larger fields were found necessary and also more water for the proper flooding of the fields. Gulleys were dammed up and allowed to fill with water during the winter months. Small pumps were then operated by five or six horse power engines to pump this water on the fields in the

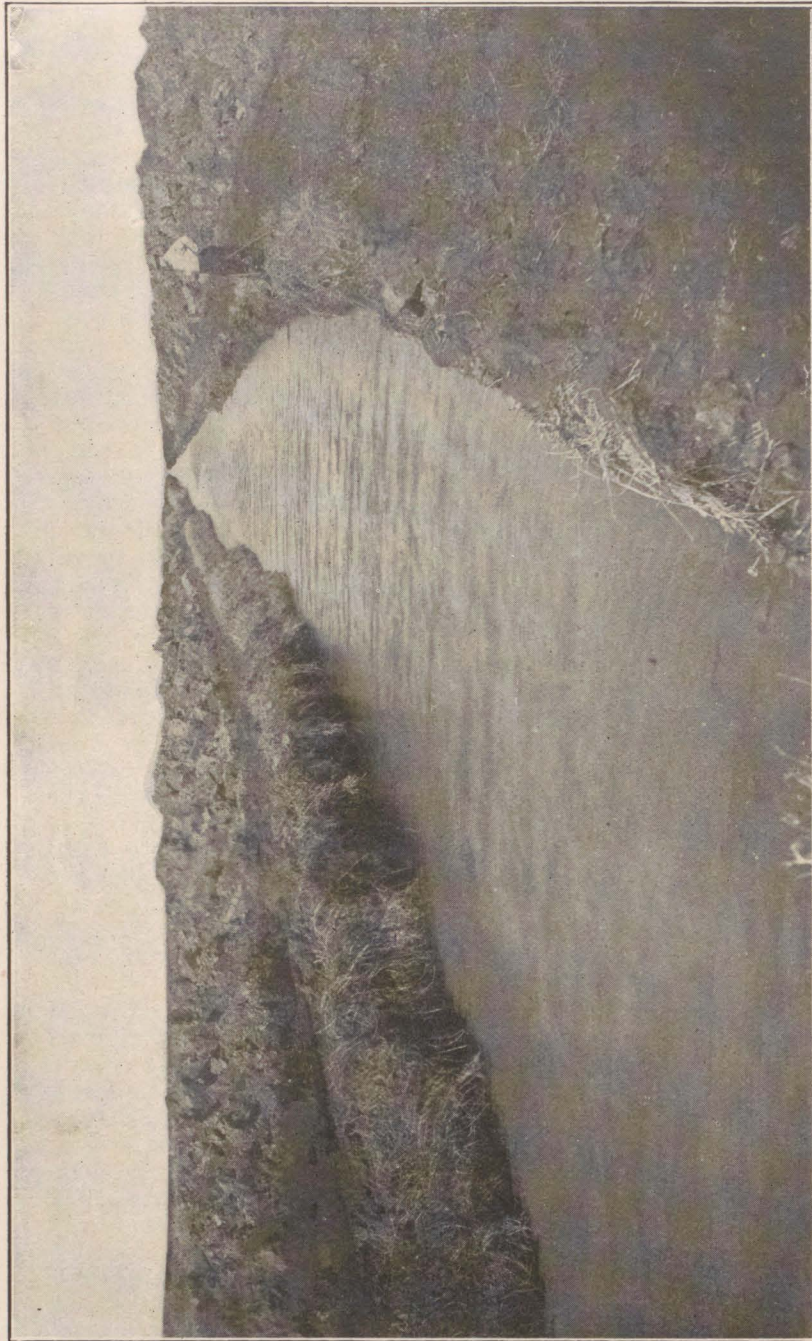


Cutting Rice Canal with Steam Dredge—Sunset Route

growing season. The small patches inclosed by the old-fashioned slab fence soon gave way to larger fields fenced with barbed wire. The broadcast seeder, attached to the farm wagon, rapidly superseded the planter, with his bucket of rice, sowing by hand. First the cradle and then the self-binding harvester took the place of the old-fashioned sickle. Northern horses and mules rapidly crowded out the diminutive Creole ponies. The little six-inch cotton plow was laid away or left in the field, and sulkey-riding and gang plows took its place. The old-fashioned three-cornered drag, with its straight wooden handles, found its place in the past history of the country, and its going made room for the spring tooth, the cutaway and disc. The man who pounded out a few sacks of rice in a day with his flail, and the next day cleaned it, if the wind blew; stood with his hands in his pockets and stared hopelessly at the steam thresher as it threshed and cleaned from twelve to fifteen hundred bushels of rice per day.

After years of rice-growing in Eastern Texas upon what was known as the "Providence Plan," the industry gradually assumed a proportion of some importance, the rice area gradually broadened, and considerable yearly increase in acreage was made. The first effort to irrigate the crop on a large scale was made in 1897, when the Port Arthur Canal Company installed an irrigation plant in Jefferson County, although two years previously a rather large acreage had been planted in the same County on Taylor's Bayou, from which water was pumped. From that time the growth of the industry was rapid until the acreage for 1906 was 235,000, and the production 1,900,000 bags, yielding to the rice farmers the neat sum of over \$5,700,000. After the Port Arthur Canal was installed, every year saw the number of plants, acreage and territory increased. Until 1899 the cultivation of rice was confined to the territory east of Houston, but the following year 200 acres were planted in Colorado County, and thereafter the development west of Houston was rapid. It will therefore be noted that the present rice industry of Texas is entirely the work of the past decade.

Fields may differ in yield, but this is due to the farmer and not the land or the climate and when this area is given good tillage and care, it will produce as large crops as can be grown upon the most fertile lands of any country. The industry has proven highly remunerative, and has caused some enhancement in the value of rice lands, which, however, are still so low as to afford an income, at present valuation, largely in excess of the returns from field crops in many other States. The coastal plain in Louisiana and Texas is crossed by numerous streams, which afford a large water supply and the elevation is sufficient to provide good drainage. Throughout this prairie region there are numerous ridges higher than the rest of the land, and upon these ridges the canals are built by throwing up par-



Rice Canal Nearing Completion—Sunset Route

allel levees. The surface of the streams in all this territory is lower than the lands to be irrigated. For several years after the new method of culture came into vogue, estimates of the area available for the crop were based entirely upon the water supply from streams, but it has since been discovered that the prairies of the coastal belt are underlaid with water bearing gravel from 30 to 40 feet thick and reached at comparatively slight depths. The wells frequently flow and it is seldom necessary to pump more than a few feet. Thousands of these wells have been sunk all over the Rice Belt in these States, and the flow from them is often sufficient to irrigate 100 to 150 acres. The cost of sinking them is comparatively small and the system of well irrigation has made thousands of acres of land available for rice culture that could not have been supplied from streams, and it has also been resorted to by persons who have not sufficient capital to install a pumping plant and did not care to cultivate rental property.

#### RICE CULTURE.

Volumes might be written concerning rice culture. The general opinion among Northern people is that rice is raised only on low, marshy ground. As a matter of fact, rice is raised on high land in exactly the same manner as wheat or oats, except that the ground is flooded during the growing season. The ground should be plowed during the winter, disked and seeded in the spring from February to May, although crops have been made with planting as late as June or July.

When the plant begins to mature the water is turned off, the crop harvested with a self binder and threshed the same as wheat or oats. Rice deriving a large percentage of its nourishment from water does not exhaust the soil and many successive crops may be raised without a noticeable decrease in yield or injury to the land. The Government gives the average yield at 12 barrels per acre, but a good farmer will obtain anywhere from 15 to 25 barrels of 162 pounds each, which will sell in the field after threshing at \$3 to \$4 per barrel, according to quality. The consumption of rice, per capita, in this country is increasing constantly and it is not probable that the United States will ever be able to produce enough to supply the home demand, as this cereal can only be raised in a limited territory.

The manner of cultivation changes with conditions and soil. The seed is usually sown with a seed driller in April and May. In wet culture the fields are flooded and plowed in water, the rice sown and harrowed in wet, after which the water is withdrawn and germination ensues. Gang-plows, harrows, seeders, self-binders, and the different sorts of machinery used in wheat



Rice Canal Completed—Sunset Route

culture in the Northwest are profitably used in the rice fields, and, with exception of the flooding of the fields, the culture and care of the two crops have much in common. The Rice Association collected the expressions of a number of the most prominent rice growers, who agreed, in the main, on the following methods: The land is broken with four-mule gang-plows, reaching about three inches, although two to two and one-half inches is deep enough for sod. Disc and spring-tooth harrows are used, and, where necessary, complete pulverization is secured by the use of a smoothing harrow. Should the ground be too hard, water is turned on to soften it. The stand is found more uniform where a drill is used, although the rice may be sown broadcast. In moist, warm weather, water is not turned on for from four to six weeks, and then care is taken not to cover the tops. An average season requires three months' flooding.

The water is withdrawn from the fields when the heads begin to turn and the rice is passing into the "dough" stage. This is usually from ten to fourteen days before harvest begins.

Three horses with a modern self-binder will harvest from five to twelve acres daily. The same thresher used for oats will thresh rice. Where the farmer supplies the hands the thresher will usually charge two and one-half cents per bushel. In threshing from the shock, something like seventeen men are required. Little fertilizer has been used thus far in rice culture, some claiming that after several years of rice growing land shows no deterioration.

#### RICE LANDS.

The first essential in the cultivation of all crops is selecting land suitable to the growing of the crop you desire to cultivate. In rice farming the lands must have a nearly level surface, so that the water will stand evenly on the land and enable large fields to come under the smaller levees which hold the water on the land. The soil should be from four to fifteen inches in depth, under which must be clay so as to prevent the sinking of water into the earth. There are several other important reasons favoring shallow soil. The growth is not so rank, which gives a better head and less straw, the ground dries out more rapidly than deep soil, and the harvesting is much easier.

#### IRRIGATION.

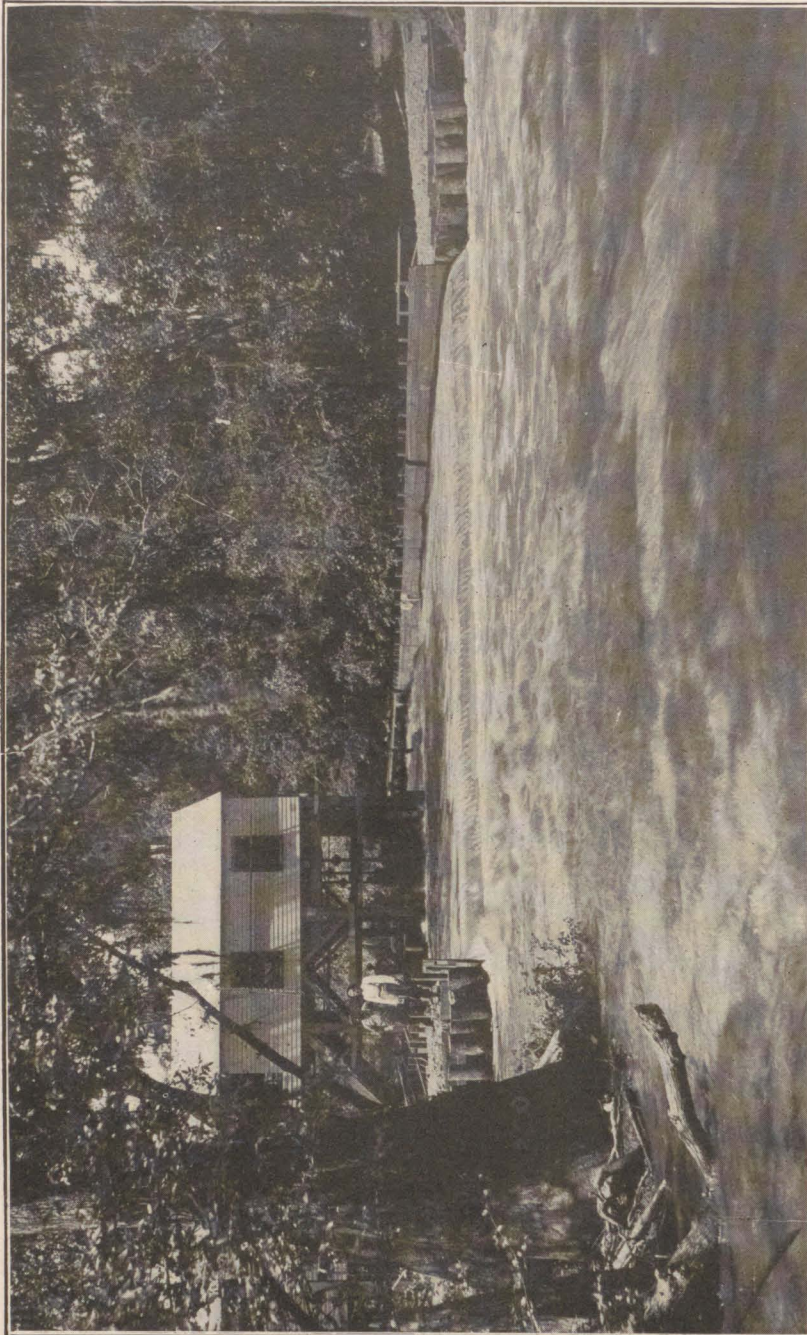
Probably the greatest element in the transformation of the industry from a small and insignificant beginning to what is recognized now as one of the leading and best paying industries in the Southern States, may be found in the extensive system of irrigation that has been established in the last few years.



The most sanguine believers in rice culture never expected to see the many inexhaustible streams and bayous, with which the prairie regions abound, and which connect the large bodies of fresh water lakes and bays lying close to the Gulf Coast in Texas and Louisiana, utilized for irrigation purposes, on account of the high lift from these streams, which, in many instances, is from twenty to sixty feet. In consequence, thousands upon thousands of acres of rice land that was supposed to be inaccessible for this purpose have proven to be a "bonanza" to their owners. They have, on this account, suddenly developed an intrinsic value that readily places them by the side of the most valued agricultural lands in the United States. The development of rice culture requires considerable preparation and goes much further than planting and harvesting. In the first place, companies are organized to build canals and put in the pumping machinery. This necessitates an outlay of from \$50,000 to \$300,000, according to amount of land to be irrigated.

#### RICE CANALS

Are constructed by building two parallel levees over the prairie, one hundred feet apart, and varying from three to eight feet in height. These levees are made the same as railroad dumps, except not so wide, and often extend four to six miles, and are termed main canals. Some canals have as many as six and eight laterals. The engineer, in locating the main canal and laterals, selects the highest lands, and hence some canals have many different courses. The object in clinging to the most elevated land is that all land will be below the level of the water in the canal. Now, get pictured in your mind these parallel levees of the main canal, and branching off therefrom, the lateral canals, all of which penetrate, say, twenty thousand acres of land. The levees of the main canal begin on the bank of some inexhaustible stream, or its tributary, at which point the immense pumping plant is located. Whenever it becomes known that a rice canal is going to penetrate a certain territory there is a rush for lands, and by the time the canal is finished, houses are completed and many farmers are engaged in breaking the sod. The two ten-gang plows and four large mules do the work. After plowing the disc harrow is needed to cut the sod, and in April and May the sowing commences, and is done after the manner of wheat, oats and similar grain. The press drill or seeder can be used, but the drill is preferable, for it gives a more regular stand and ripens more evenly.



Rice Pumping Plant—Sunset Route

### THE PUMPS

Started and a regular stream is sent boiling and foaming through the levees, filling them bank full. The flood gates to the lateral canals are loosed and they are soon filled. You will note the water is now from one to six feet above the lands to be irrigated. You behold field after field of rice, which resembles so many wheat fields in appearance, and which are now ready for the water. The canal superintendent goes from farm to farm and the flood gates from the main and lateral canals are lifted, and thousands of gallons of water go pouring into the fields, which is held on the land by small levees constructed for this purpose, and with a view to have the water stand as evenly on the lands as possible.

The rice farmer from this time until harvest begins has only to watch his levees and cry out, "Give me water, water," which he keeps up for about seventy days, the usual period of irrigation. The flood gates are now closed and the drainage gates opened.

### HARVESTING

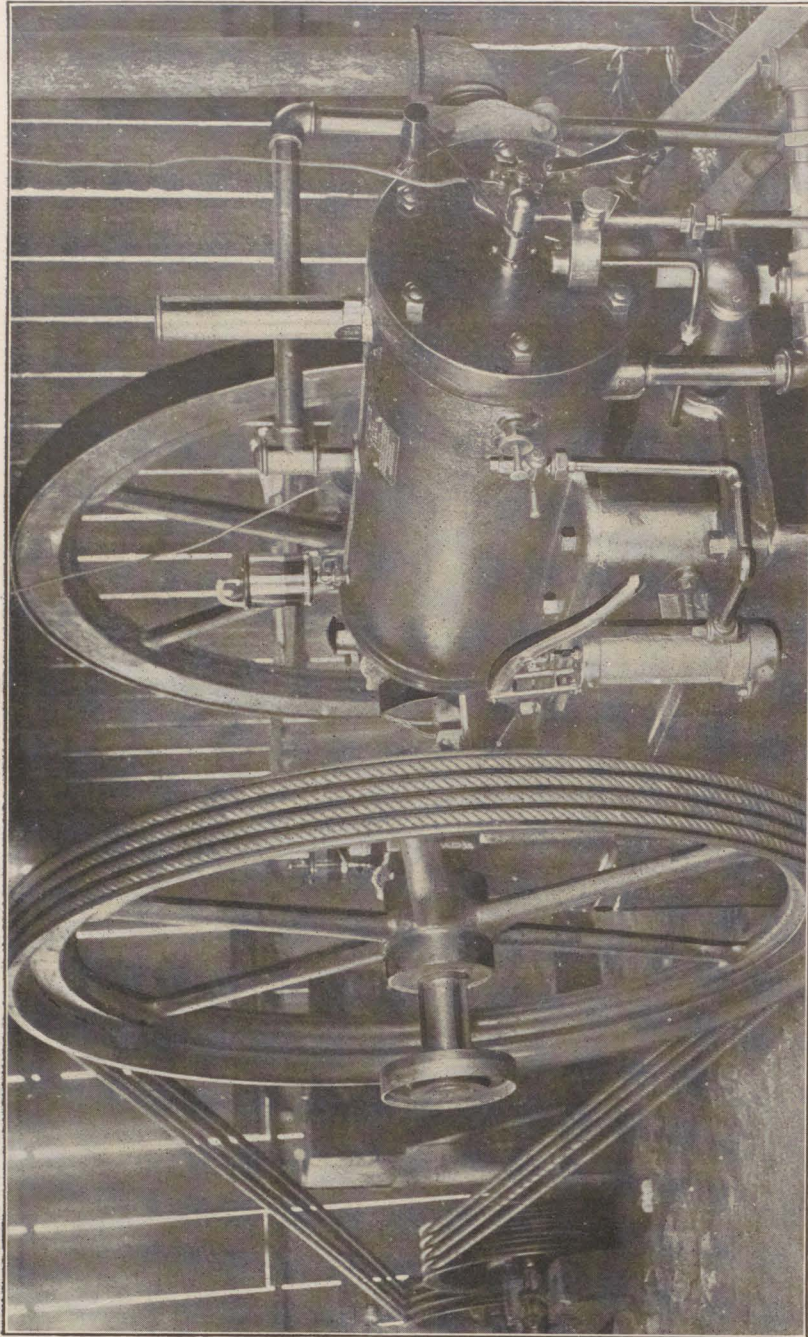
Begins as soon as the field dries sufficiently to permit the harvester to enter, which is from ten to fifteen days. The rice self-binder is identical with other grain harvesters, except stronger, heavier, and with broad wheels to prevent cutting into the soft earth. The rice straw is larger and the yield of grain greater than wheat, hence the increased strength of machinery. Rice is shocked and permitted to stand for about twenty days, when it is either stacked or threshed from the shock.

### THRESHING

Proceeds just as with wheat or oats. There is but little difference between the rice and wheat thresher. The charges per bushel are practically the same. Rice is sacked at the machine, and the average weight is one hundred and sixty-two pounds. It is not unsacked until emptied into the bin at the rice mill for the reason that each field may have a different grade, and hence it is sold in lots.

### MARKETING.

Rice warehouses are found in all the towns in the rice-growing territory, for the farmers who desire to ship to the larger markets. This method, however, has been largely superseded by the rice mills, who send their buyers from one warehouse to another until the entire crop is disposed of. Rice is no longer milled on toll as was customary during the early life of the in-



Interior Rice Pumping Plant—Sunset Route

dustry. The rice planter has, therefore, the opportunity of milling and selling his own crop, or the mill will do it for him, or he can dispose of it to the highest bidder "in the rough."

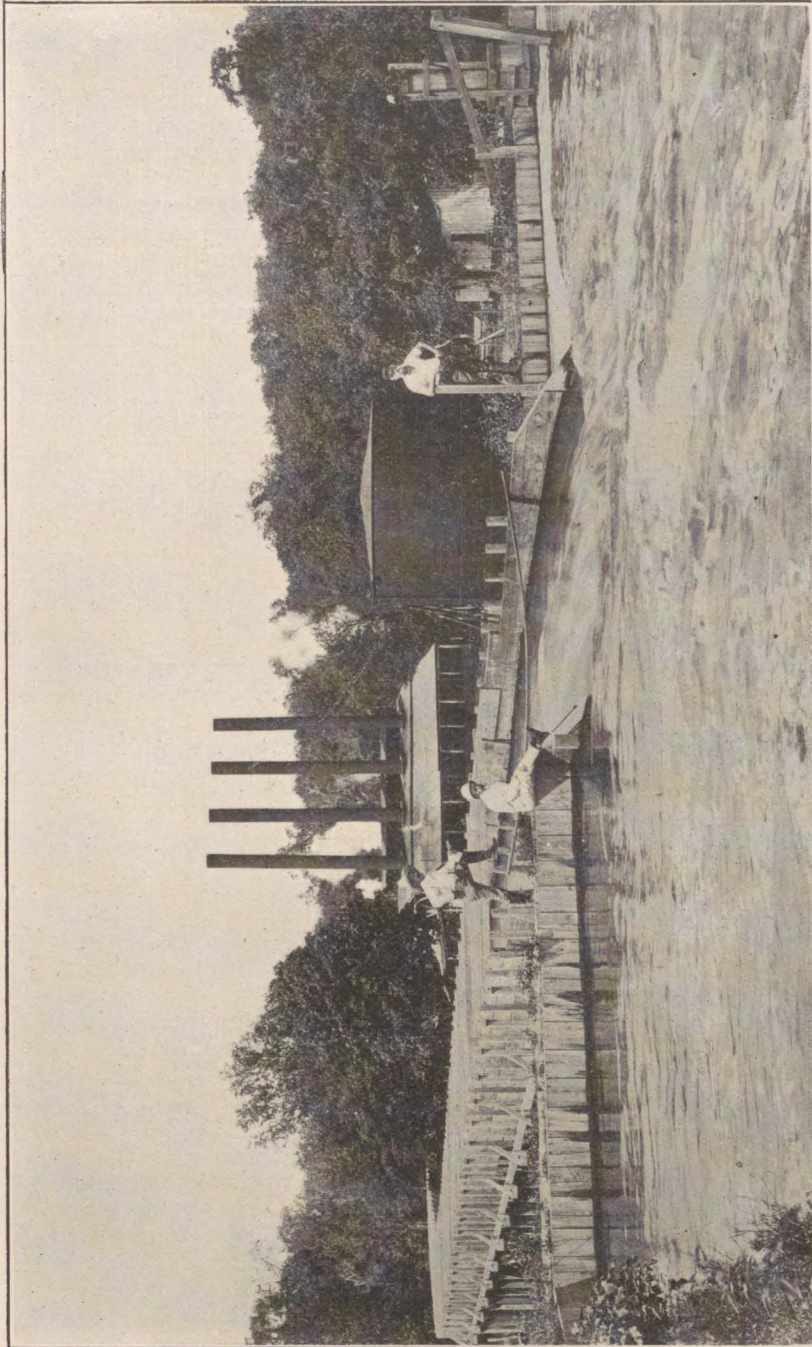
### PROFITS.

Now we have reached the vital part of rice culture, and which, of course, influences all business enterprises. The first consideration is to calculate the cost and the profit. No wise man ever embarked in an undertaking without weighing well these two points. One man can easily handle one hundred acres of land. Some handle a hundred and fifty. The cost per acre, including the water rent, is about \$10. If you are a tenant, add \$7 more for land rent, and your total cost is about \$17. The average price of rice is \$3 per barrel, and with an average yield you have \$36 an acre, or \$19 profit per acre, or \$1,900 from one hundred acres. These figures are conservative, and many farmers make much more.

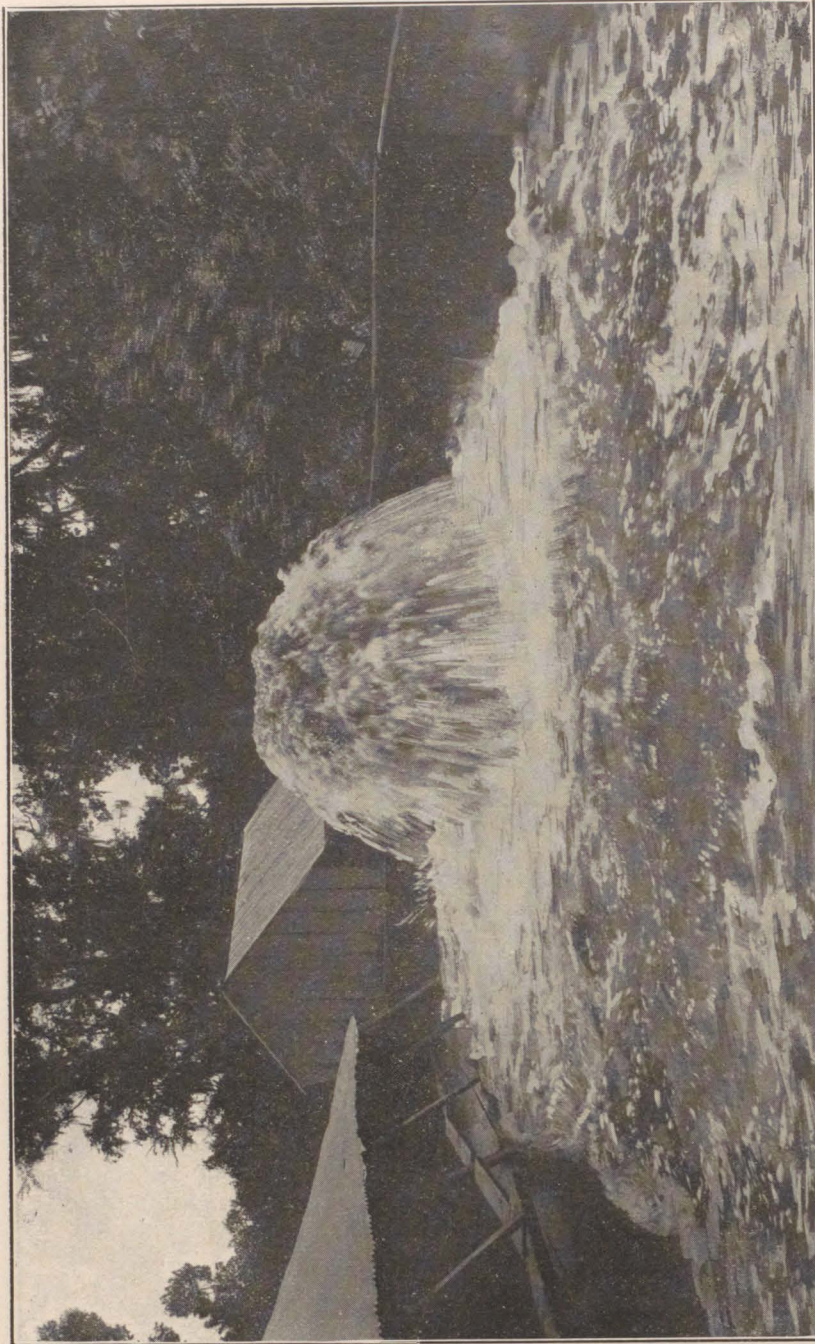
In an interview printed in one of the newspapers a few days since, attention was called to a fact in connection with the inducements that are held out to investors that can not be too frequently repeated. That fact is, that in most instances agricultural lands in Texas and Louisiana can be bought at prices that do not more than equal the value of a single crop. So far as we know this is true of no other section of the country, and it ought to demonstrate to the world at large the immense fortunes that are yet to be made in such investments.

It would, perhaps, be unfortunate if such a statement of facts should lead to the purchase of this land for purely speculative purposes by alien corporations, but this is what must inevitably take place, unless homeseekers and our own people awaken to the possibilities in this line and avail themselves of the opportunities everywhere before them. Such a state of affairs can not possibly be allowed to exist very long, now that attention is being directed to it, and it would be well if young men should provide themselves with homes against the inevitable time of high prices. Lands in the North and West, that are not so productive as is much of that selling in the Coast Country today at from \$10 to \$30 per acre, sell readily for \$100 and \$200, and with the movement that has already set in towards these States, we may look for a steady rise in the price of our cheap lands, and a time not far distant when they will be rated in price by the value of the crop that they are capable of producing. When this takes place, they will be beyond the reach of the poor man.

With good cultivation and care rice yields 15 $\frac{1}{2}$  barrels (60 bushels) per acre. While the average is about 12 barrels per acre, larger yields are often obtained. Mr. S. Saibara, in Harris



Main Flume and Rice Canal—Sunset Route



Artesian Well for Rice Irrigation—Sunset Route

County, Texas, this season (1909) averaged 25 sacks on 200 acres (weighing about 200 pounds per sack). Mr. T. Tekeda, another Japanese rice farmer in the same county, raised an average of 23 sacks on 300 acres, and Mr. L. Garrison, in Orange County, harvested this season 447 bags of high grade rice from 23 acres.

Similar results to these are reported from Louisiana and in both these States individual cases are not uncommon in which farmers have purchased farms on credit, and by the cultivation of a single season's crop have paid for their farm and put money in the bank.

Thousands of acres are rented to tenants for crop rent and there is no crop grown that pays so well. There is no road to a home quicker than rice farming. It is not unusual for tenants to buy their own farms with the results of one year's work.

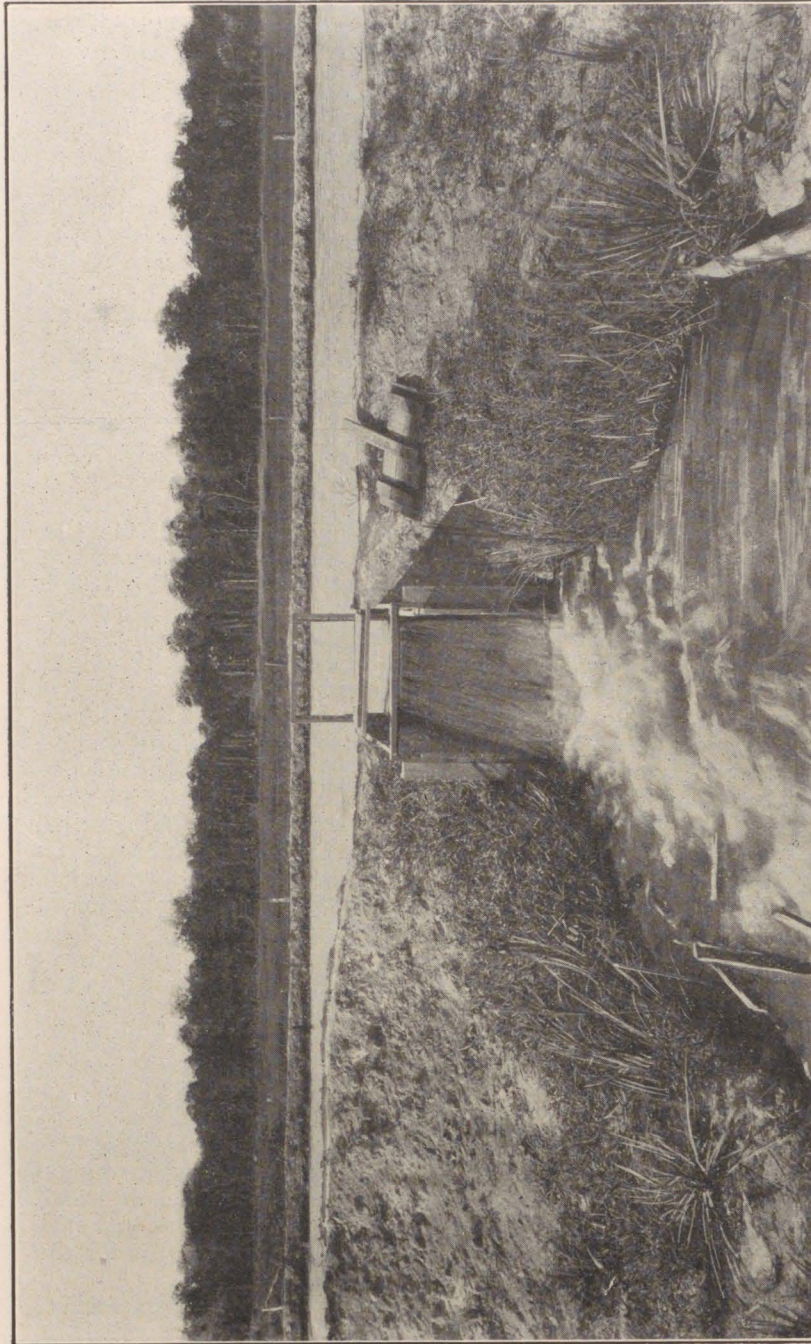
### RICE.

Among the cereals and grains, rice unquestionably stands first in importance in regard to the number of persons who consume it, the area devoted to its cultivation, and the amount annually produced thereon in the whole world. It has been stated that rice forms the principal, and in some cases almost the only, food of from **one-third to one-half of the whole human race**, a statement which can not be made of any other edible product, except perhaps of meat. China and its dependencies have a population of about 404,000,000, or 27.5% of the total population of the globe, and rice certainly forms the principal food of its people. The same may be said of India, with its population of 273,000,000, or 18.6% of the total population. Statistics have shown that in Japan, which has a population of 39,000,000, rice forms 51% of the total sustenance. The population of the principal remaining rice-consuming countries of Asia and Africa may be roughly estimated at about 80,000,000, and the total of the above figures reaches the sum of 796,000,000 people, or 54.2% of the total population of the earth.

### Economic Feature.

The annual cost of food for our now 80,000,000 of people is about \$4,000,000,000. Twenty-five per cent saving in annual cost of food to a family, which is entirely practical, is worth considering, and if this 25 per cent saving were placed in a savings bank by a family it would not take many months for the family to save enough to own their own home.

The living of all classes of Americans is too expensive. Food is purchased without reference to its nutritive value, its digestibility, or its adaptation to the requirements of the body



Main and Lateral Rice Canals—Sunset Route

under special conditions of life; consequently there is enormous waste of food.

“In very many American families a considerable part of the money spent for food is wasted. In some cases excessive quantities of food are bought, while in other cases the expenditure, though ample, fails to provide adequate nourishment. There is opportunity, therefore, for material improvement of the diet to the advantage of both health and purse. By a wiser selection of food materials, based upon knowledge of actual nutritive value, a more satisfactory diet could be secured, which would be better adapted to the physical needs of the individual, and at the same time be more economical.”

In this connection Dr. W. O. Atwater, in his admirable bulletin on “The Chemistry and Economy of Foods,” makes the following pertinent statement:

Food constitutes the chief item of the living expenses of the people, of our agricultural production, and of our exports. Half the earnings of wage-workers in this country and in Europe is spent for food. The health and strength of all are intimately dependent upon their diet. Yet most people understand very little about what their food contains, how it nourishes them, whether they are economical or wasteful in buying and preparing it for use, and whether or not the food they eat is rightly fitted to the demands of their bodies. The result of this ignorance is great waste in the purchase and use of food, loss of money and injury to health.

#### Strength and Vitality.

In search of food to meet the requirements of an impaired digestion, I recalled the fact that physicians usually prescribe rice for sick people; that laboring people, upon a diet of rice, though able to perform a large amount of work, complain of being hungry between meals. This was precisely what I wanted—energy and hunger. I had it as a child and lost it somewhere in a busy life. Rice-eating nations have energy with unimpaired digestion. In Japan it is a common saying among resident American women, “I could do this if I had a Japanese back,” referring to the strength of loins possessed by the native women. Every traveler in that distant land has noted with surprise the ease with which a boy will draw a man at the rate of six miles an hour along the streets. In the late rapid advance upon Peking, it was found that the Japanese could outmarch all the armies. With full equipment they advanced all day at double time, and repeated it. These women with backs, these boys with the speed of a horse, and these double-quick soldiers, live mainly on rice. THE CHINESE COOLIE WORKS IN THE RICE MARSHES OF SIAM UNDER A TROPICAL

SUN, DRINKS STAGNANT WATER, BREATHES MALARIA, AND REMAINS IN PERFECT HEALTH. HE LIVES ON RICE.

#### Rice and Energy.

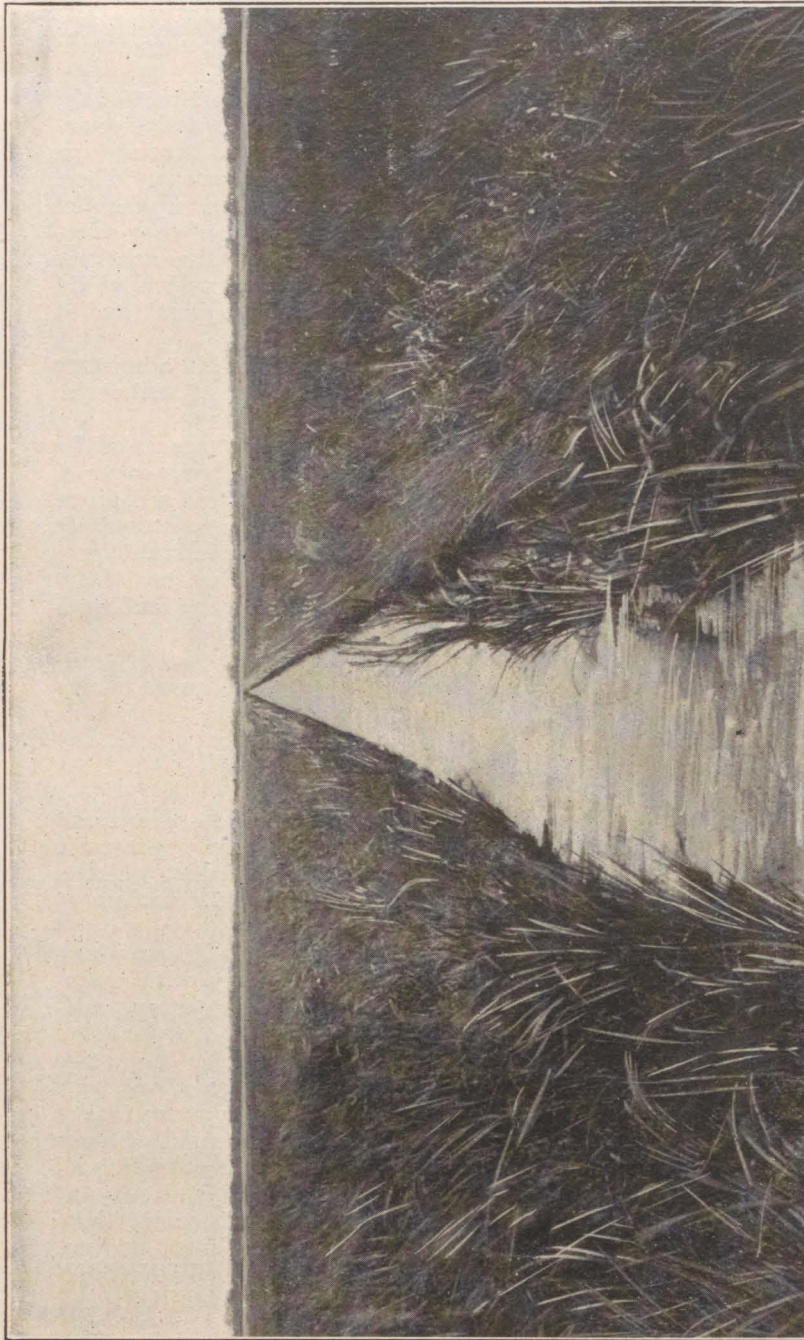
Something more than a mere food value should be considered in selecting the family subsistence. Ease of digestion and length of time required are important factors. Evidently a food that will digest in one hour is superior to one that requires four hours, all other things being equal; with the shorter period the stomach is given rest. Many diseases are caused by eating a second meal before the first has been fully digested, which generally occurs where there is reduced vitality or weak digestion. Many persons rarely experience, in adult life, the sensation of hunger; others are afflicted with a constant lassitude; it should occur to such that their food is not properly digested and assimilated. A diet of rice, with some easily digested nitrogenous food, like extract of beef, will relieve most cases thus afflicted without medicine. Your doctor advises you to eat rice when other foods fail to agree with you.

#### The Money Value of Food.

Beef and all lean meats are sold in the market at about five times their real value for food. Oysters are sold at near twenty-four times their value, and canned tomatoes at about twenty-five times. A diet composed of lean meats is costly and unbalanced, because there is an excess of material for repairing the system and a deficiency in heat and energy. What can profitably be supplemented? The addition of wheat bread is not economical, because it does not change the ratio sufficiently. The per cent. of nutriment in the Irish potato is too low, and its digestion too difficult. The ideal food to be used with beef, veal, turkey, chicken and all lean meats, is rice. It should always be used in soups and stews for dressing. It should be eaten with beans, peas, cheese and all highly nitrogenous foods, for perfect nutrition.

#### Food and Temperament.

Food has a controlling influence on the temperament of nations. The restless energy that beef-eating nations possess may become a disease. A diet largely of rice will tend to restore those equable conditions which belong to a well-balanced system. The quiet patience of the Chinese and Japanese is due to rice. **Irritable and nervous people should eat rice.**



Lateral Canal Showing How Rice is Irrigated—Sunset Route

## VALUE OF RICE AS A FOOD.

(FROM NEW YORK COMMERCIAL)

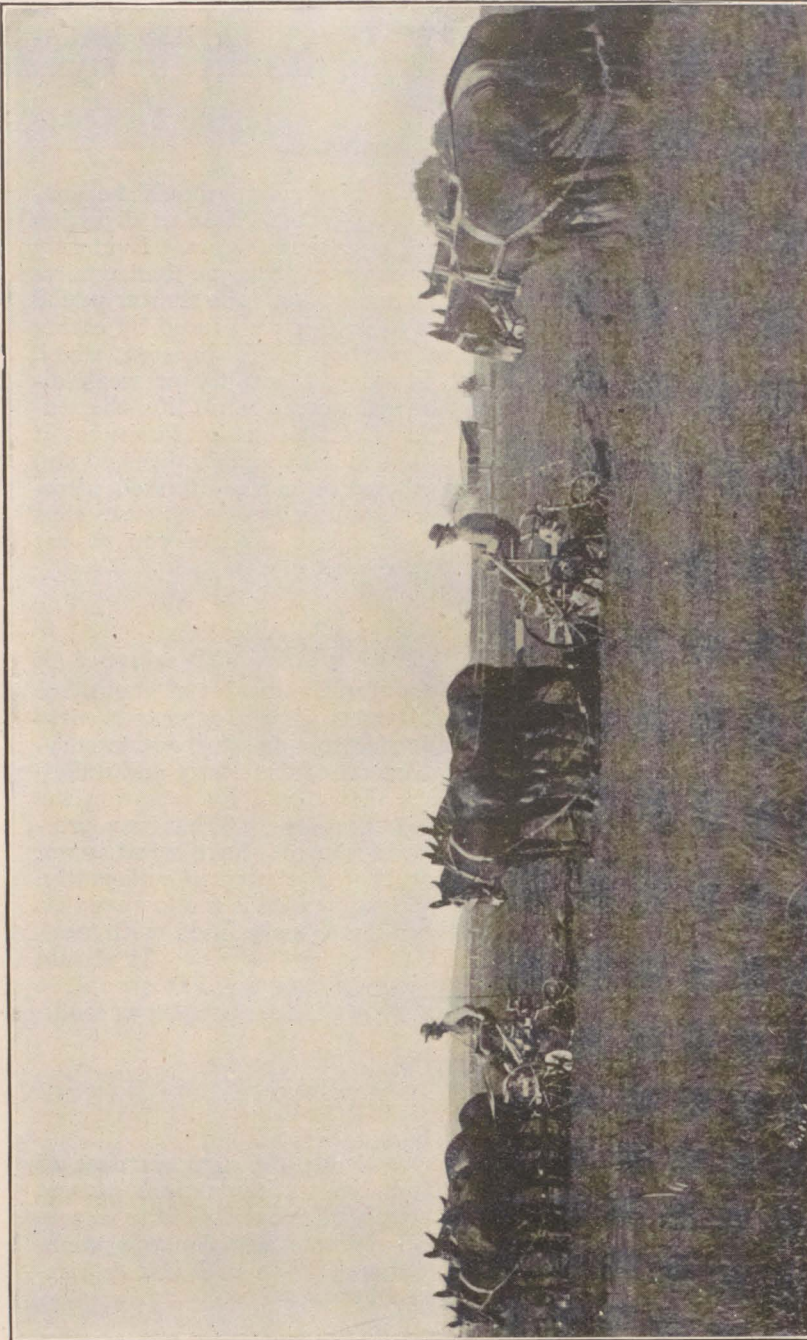
In view of the gradually increasing amount of capital which is being invested each year in the rice fields of Texas and Louisiana, and almost limitless commercial expansion which that industry holds out to the rice interests of this country, the question of the preparation of the cereal by the mills has now become a problem of importance.

The rice of commerce of the United States is milled by modern machinery, the hulls being removed by rapidly revolving millstones and separated from the grains by screens and blowers. Other hullers remove the smaller particles, and the flour and bran are separated. Then comes the polishing of the rice, which gives it a fine, glossy luster or pearly appearance, and makes it sell at a higher price on the market. This process, however, is really detrimental to the grain as a food product. It lessens the nutritive value by removing four-fifths of the essential oils and flavor, besides 25 to 30 per cent of the frame-building material.

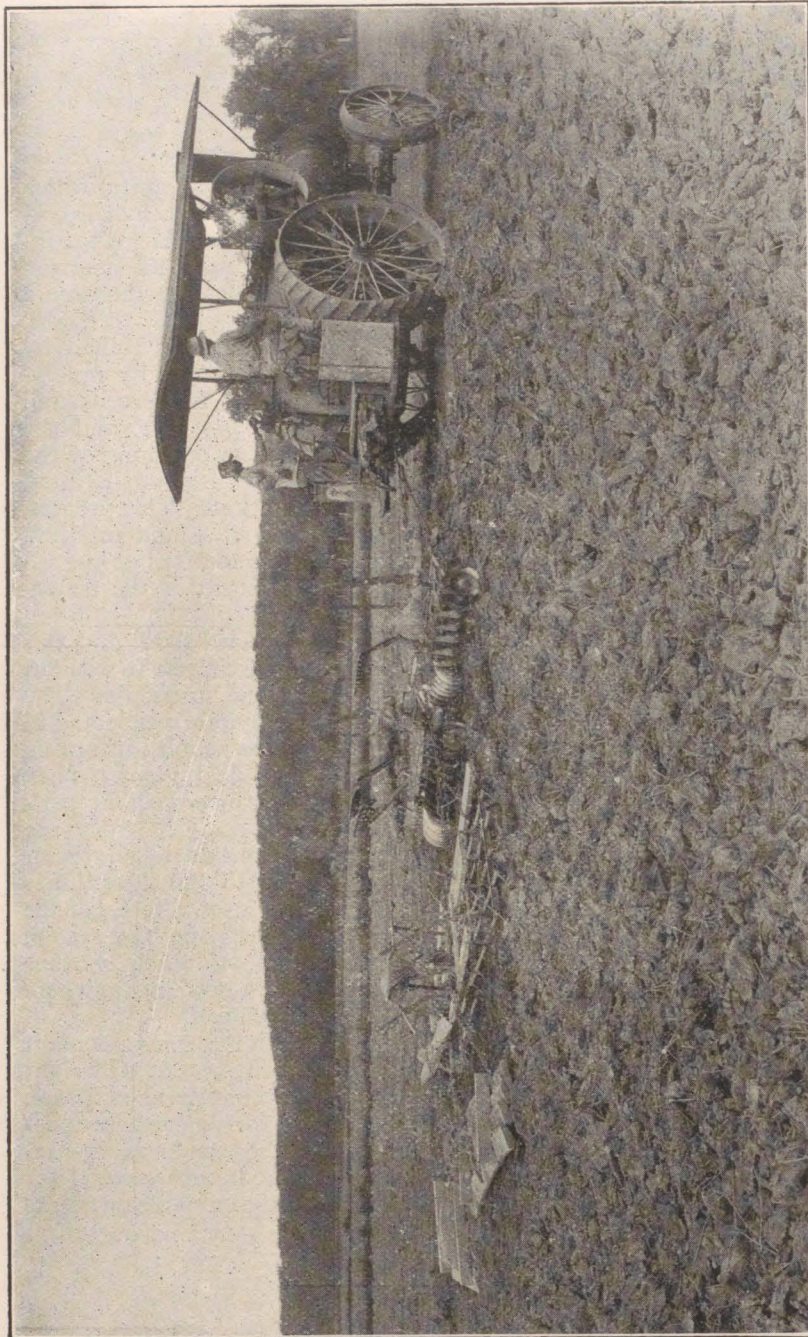
All the nations which use rice as a standard food, and this includes more than half the people of the earth, use it without polishing, so as to retain the flavor and the nutrients. The effect of a rice diet on the Japanese and Chinese is reflected in their great energy and endurance. They are peoples of strong nerves, equable temper and wonderful physical vigor. They have energy without irritation, and perseverance without periodic collapse.

Rice possesses healing and curative properties to a greater degree than any other cereal, owing chiefly to its digestibility and nerve-building qualities, rice diet being known to be of the greatest conceivable assistance to nature, restoring the system from the ravages of dyspepsia, indigestion and their various attending evils. The absence of such diseases in countries where rice is the principal article of food speaks for itself.

How to secure the most perfect nutrition is an important problem. With proper nutrition the human system will right itself under attacks of disease, and normal conditions will soon be restored. For economy, for health and for vigor there must be a proper ratio between the frame-building and energy-producing constituents of food. As a rule foods are selected for the gratification of the taste rather than for the valuable nutrients they possess.



Breaking Ground for Rice—Sunset Route



Harrowing Rice Ground—Sunset Route

**RICE IS THE MOST NUTRITIOUS OF ALL CEREALS.**

From Report No. 6, of Miscellaneous Series, U. S. Department of Agriculture, Page 12:

Total nutritive matter contained in—

	Per cent.
Rice.....	86.09
Corn.....	82.97
Wheat.....	82.54
Oats.....	74.02
Fat Beef.....	46.03
Potatoes.....	23.24

**HEAT VALUE OF RICE PER POUND.**

The following is taken from the Farmers' Bulletin No. 249, U. S. Department of Agriculture, "Cereal Breakfast Foods":

	Calories
Oatmeal, raw .....	1,767
Cornmeal.....	1,662
Rice, polished.....	1,546
Rye, flaked.....	1,526
Barley, pearled.....	1,514
Wheat, cracked .....	1,501
Buckwheat, flour.....	1,471
Bread, white.....	1,203
Beefsteak.....	950
Potatoes, raw.....	369

It will be seen by this table that rice has a higher fuel value than wheat, rye, buckwheat, bread, potatoes and beefsteak, and is therefore better suited for cold climates than the foods\_ afore-said.

**[FOOD VALUE OF RICE AND POTATOES.**

[Extracts from Reports of United States Department of Agriculture]

COMPARATIVE ANALYSIS OF		
POTATOES		RICE
78.3.....	Water.....	12.4
2.2.....	Protein.....	7.4
.1.....	Fat.....	.4
18.4.....	Starch.....	79.4
1.0.....	Mineral Matter.....	.4
<hr/>		
100.0		100.0
375.0.....	Fuel Value per pound.....	1630.0



## TIME REQUIRED TO DIGEST FOODS.

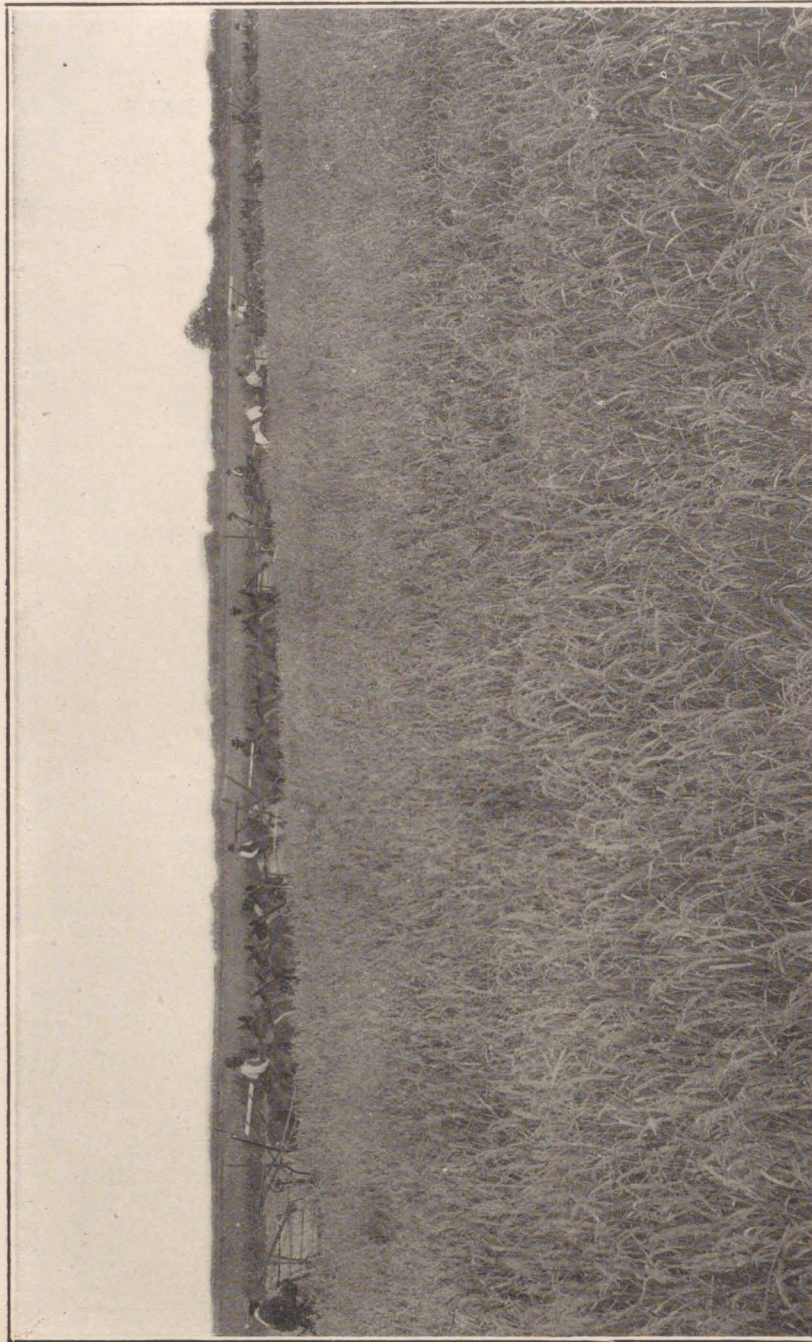
Rice, boiled.....	1 hour.
Corn Meal.....	3 hours, 15 minutes.
Wheat Bread.....	3 hours, 30 minutes.
Oat Meal.....	3 hours.
Irish Potatoes.....	3 hours, 30 minutes.
Roast Beef.....	3 hours.
Turkey.....	4 hours.
Oysters, stewed.....	2 hours, 5 minutes.
Fish.....	1 hour, 45 minutes.
Eggs, Fried.....	3 hours.
Apples, Raw.....	1 hour, 50 minutes.
Tomatoes, Raw.....	2 hours, 30 minutes.

It appears from the figures above, potatoes contain a large amount of water—78.3 per cent. As potatoes are commonly eaten, a good deal of the flesh or edible portion is rejected with the skins. When they are rough from defects in growth, or from shrinkage and shriveling after keeping, the amount of flesh cut off in the peeling is larger still.

In the table of analyses published in the late bulletins of this department, the amount of refuse and edible portion rejected with it is estimated at 20 per cent. of the whole, and the edible portion left at 80 per cent. Doubtless in many cases **the rejected portion is very much larger.** The loss of actual nutriment of the potato by the rejection of so much of the edible portion with the skin is a much more important matter from a standpoint of nutritive economy than people generally realize.

Carbohydrates (or starch) are sources of energy and can not serve for the building and repairing of body tissues. Protein is necessary for this purpose, since it alone of the nutrients contains nitrogen, the characteristic element of the body tissue. In addition to this, protein serves as a source of energy, and thus, while the body could not be nourished on carbo-hydrates alone, it could, theoretically, on protein, since that nutrient combines the two functions of food. This deficiency in protein in the potato is another matter which people generally do not appreciate; it helps to explain why large numbers of the country population of Ireland and Germany, whose food consists chiefly of potatoes, are so poorly fed.

Rice contains about 12% of water. Although the protein of rice is much higher than that of potatoes (being on an average of 8%), the carbohydrates make up the bulk of the nutrient material, and like potatoes, rice is classed as a carbohydrate food. Potatoes, as purchased, consist of ONE-FIFTH and rice SEVEN-EIGHTHS of nutritive material. Considering the two articles as ordinarily purchased, FOUR AND ONE-HALF pounds of raw potatoes and ONE pound of rice contain nearly equal



A Field of Rice—Sunset Route



MAP OF SUNSET ROUTE  
SHOWING STEAMSHIP LINES AND RAIL CONNECTIONS



Shocking Rice—Sunset Route

weight of each class of nutrients, and have about the same nutritive value.

Tables show rice to be fully as digestible as wheat flour or Indian meal, and more so than bread or potatoes.

Rice contains about four and one-half times the energy contained in Irish potatoes, but owing to the waste in the potatoes the difference may be placed at sixfold in favor of rice.

#### A HIGH PRICE FOR WATER.

Referring to the preceding analyses: A bushel of potatoes at a price of \$1.00 per bushel, when 20% of waste matter is deducted, makes a bushel of **edible** potatoes worth \$1.25; of this 78.3% is water, which leaves about thirteen pounds of nutritive value, or an average of nearly ten cents per pound. **IN OTHER WORDS, THE CONSUMER PAYS OUT 99 CENTS FOR WATER.** Rice, with 79% starch, 7% protein, and only 12% water, is today decidedly a more nutritious and economical food, at considerable less price.

MORAL—EAT RICE.

#### EXPERT TESTIMONY ON RICE AS A FOOD.

Haskins says: "A diet of three-fourths rice and one-fourth beans or other legumes is said to be ideal for maintaining the human machine."

"Rice is used by the body with least labor to the organs of assimilation and elimination."—Bunge.

"Rice yields quickly abundant food returns, and contains much nourishment in a comparatively small space."—History of Civilization in England, by Henry Thomas Buckle.

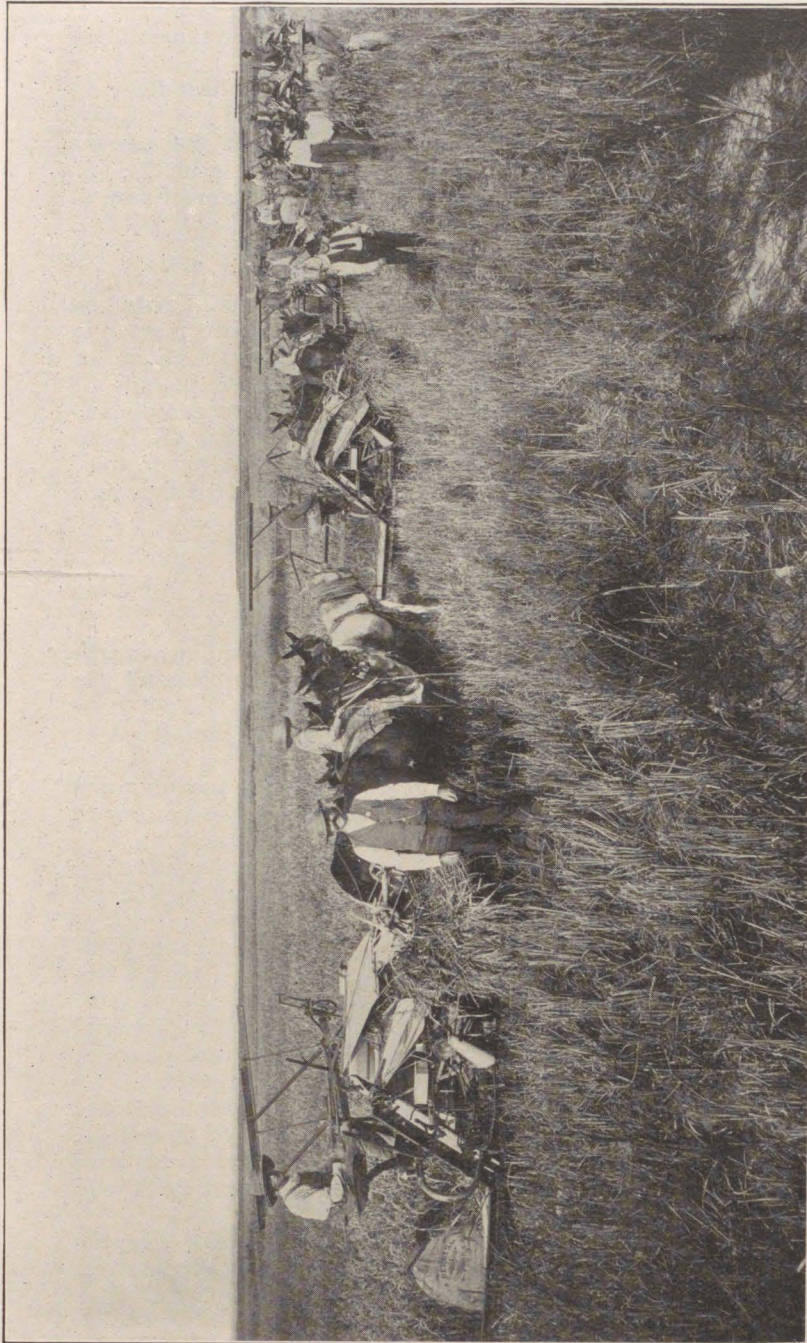
"Rice contains a greater portion of nutritious matter than any of the cerealia."—Somerville's Physical Geography, Vol. 11, Page 220.

"A combination of rice and legumes is a much cheaper complete food ration than wheat and meat."—Farmers' Bulletin No. 110, U. S. Department of Agriculture.

The substitution of rice for corn and wheat as the principal food for Southern people will tend to the development of a hardier race. It will decrease dyspepsia, malaria and mortgages.

Rice diet is known to be of the greatest conceivable assistance to nature, restoring the system from the ravages of dyspepsia, indigestion and their various attending evils. The absence of such disease in countries where rice is the principal article of food speaks for itself.

Dr. Wm. Lambert, of Wisconsin, says: "Make rice the standard of food for the American people and it will have more effect in preventing the dread disease, the 'White Plague,' than all the medicines and sanitariums in the world."



Harvesting Rice—Sunset Route

### RICE AS STOCK FEED.

The low grades of rough rice as it comes from the threshing machine can be profitably fed to all kinds of stock, hogs and poultry, which thrive and fatten on it. Ground Rough Rice makes excellent stock food. Rice bran is equal or superior to any other bran. Rice polish, the fine flour resulting from the polishing process, is a valuable stock food for quick fattening purposes, being rich in albuminoids as well as carbohydrates.

“W. P. H. McFaddin, of Beaumont, sold in Fort Worth last week sixty head of 214-pound hogs at \$8.10 per hundred, which had been fattened on rice, the same price at which hogs fattened on corn and of the same weight sold. They were the common ‘razorbacks’ of East Texas and ran on the rice fields after harvest until thirty days ago, when they were put in a pen and fed all the rice they would eat.”—San Antonio Express, December 14, 1909.

The following is an extract from a letter written to the Houston Chronicle December 22, 1909, by H. D. Spivey:

“I know by experience that rice is a much better feed than corn for this section. It is just as strengthening and much less heating. I have fed it and my team which did the same amount of labor came out with slicker coats and more life than did my neighbor’s, who fed corn.”

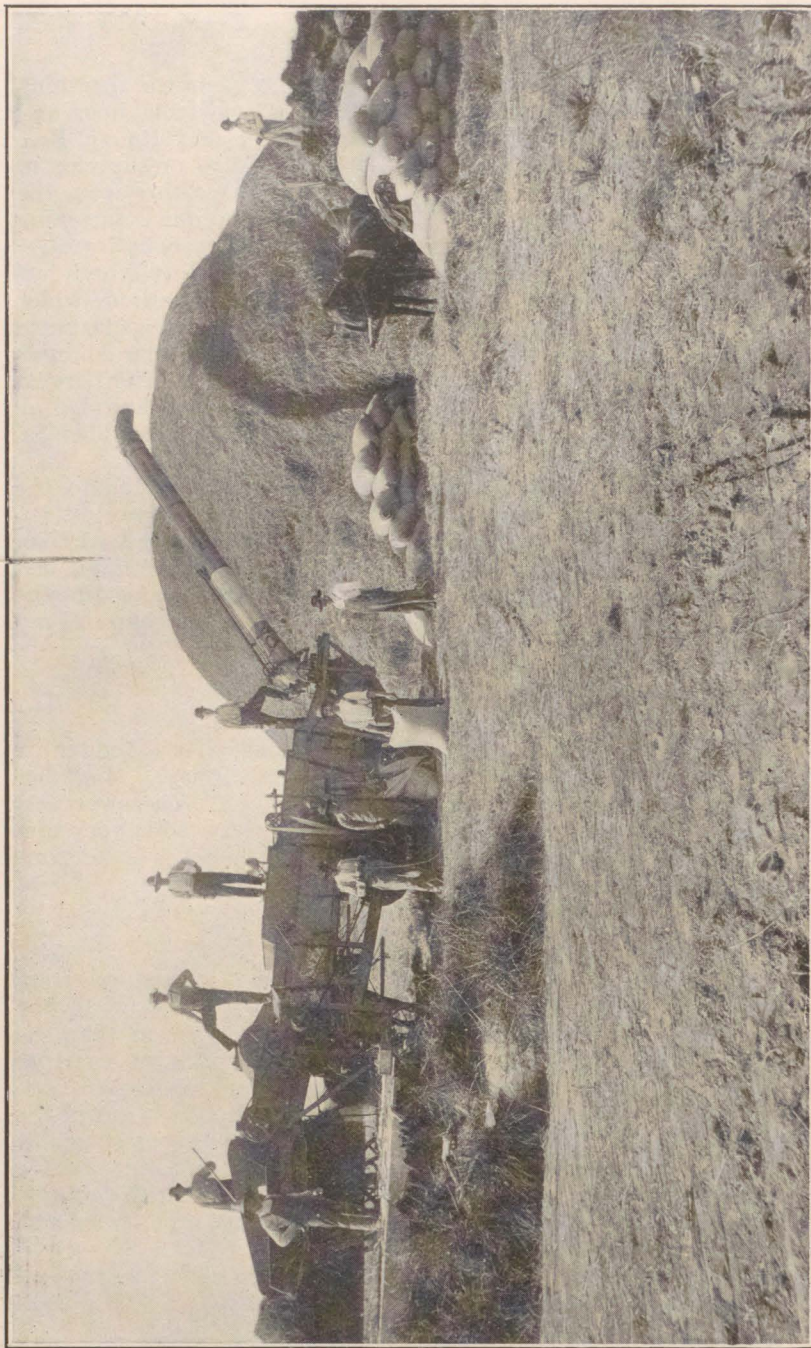
### RICE STRAW.

Rice straw makes a superior stock feed. As a fodder its value is about equal to good Southern Prairie hay. Most rice farmers use rice straw entirely for rough feed. The sweetness and excellent flavor of well-preserved rice straw adds very materially to its practical feeding value, because stock will consume large quantities of it.

### PAPER PULP.

A very superior pulp for paper making is also produced from rice straw. Probably no announcement in the history of the rice industry has proved more welcome to rice growers than the statement that the experiments in making a pure white paper pulp from rice straw have proved successful. Rice straw, thousands of tons of which are burned every year to get it out of the way, seems to fill a long felt want and experiments by responsible experts have progressed far enough to practically make it possible that a great new industry will be established in the rice country. Besides paper, the Japanese make hats, matting, rope, twine and other useful articles from rice straw.

Rice hulls are a valuable fertilizer and also make an excellent mulch for gardens and orchards.



Threshing Rice—Sunset Route

## HOW TO COOK RICE

Strange to say, except in the Southern States, the proper method of cooking rice does not seem to be understood in this country. It comes to the table as an uninviting, glutinous mass, instead of being, as it should be, one of the most appetizing dishes in appearance, with each snow-white grain distinct and separate from the rest. The great secret of the proper cooking of rice lies in allowing plenty of water, yet not too much, in not boiling for too long a time, and in not breaking the grains by stirring during the time of boiling. The rice should be washed in three or four changes of water to remove adhering rice flour, dust, etc., and should be boiled only until the grain is well softened; after this the water should be poured off, the vessel tightly closed and the rice allowed to steam.

### Practical Recipe for Cooking Rice.

One cup of rice (well washed), 3 cups of boiling water, scant teaspoon of salt, a saltspoon of lard.

Wash rice through at least six waters or until all cloudiness is removed. Bring to the boiling point, three brimful cups of water. Add the salt and the tiny bit of lard. When water is boiling briskly add the rice from which water has been drained. The boiling process will be interrupted for a few minutes, but counting from the time it starts to boil again, it will take about fifteen minutes for the rice to fully absorb the water. During this time keep the cover on, but slightly pushed to one side. At the end of the fifteen minutes the grains should be soft, not the least gritty and the water absorbed. Remove the cover and at the same heat let dry out for five minutes. If cooking on gas stove at the end of the five minutes lower gas and let the drying out process continue for twenty to thirty minutes longer. If cooking on a wood or coke stove at the end of the five minutes place cooked rice on back of stove or in oven to dry out.

By cooking rice in this manner, every bit of nutriment is retained at a minimum cost of effort. Each grain will be puffed to almost three times the size of the uncooked grain. Always cook rice with a lid over the flame. On gas stoves an asbestos lid is recommended. **NEVER STIR RICE WHILE COOKING.** A sharp knife passed around the side of the pot after the drying process starts is recommended. If lard is objected to it can be omitted. It is supposed to lessen the danger of burning, to prevent the water boiling over and lends a brilliancy to the

cooked product. A porcelain-lined iron pot is the best for cooking rice as it lessens the danger of burning. However, the precaution of the lid being used reduces to a minimum this danger.

#### Boiled Rice No. 2.

Four cupfuls of boiling water, add a teaspoonful of salt. While boiling add gradually a cup of rice. With a fork lift it once or twice, shaking the kettle, that none of the kernels stick to the bottom. Let boil twenty minutes, remove from the fire, pour off the water, if any, and place on the back of the stove or in the oven, where it will finish swelling without burning. In this way rice is plump and light and white.

#### Rice Cooked with Milk.

In the place of water, use milk, letting it come to a boil before adding the rice. Rice cooked in this way is much richer.

#### Steamed Rice.

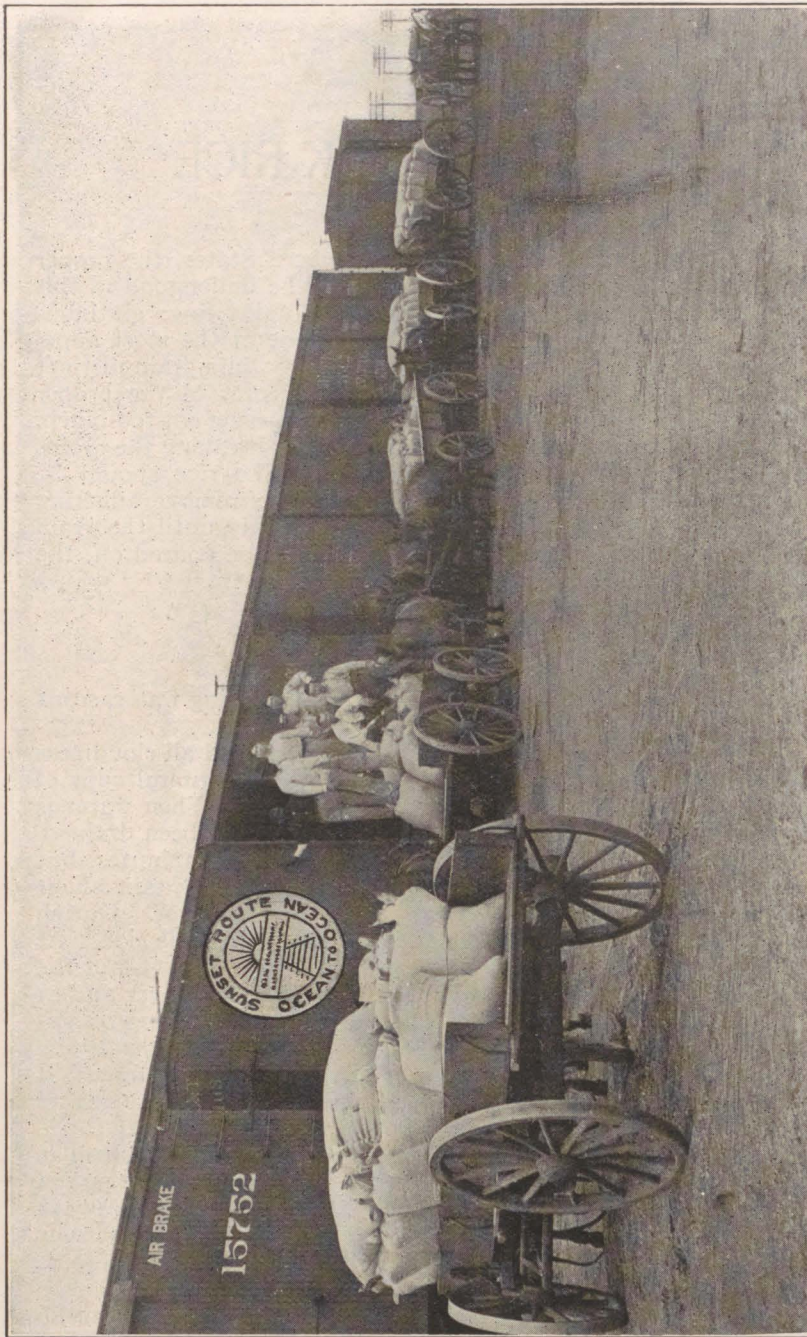
To one pint of washed rice add one pint of water and one-half teaspoon of salt. Place in a covered steamer and cook with live steam for one hour. Stir and take up with a fork to prevent gummy and lumpy appearance. Never stir rice with a spoon.

#### Jambalaya.

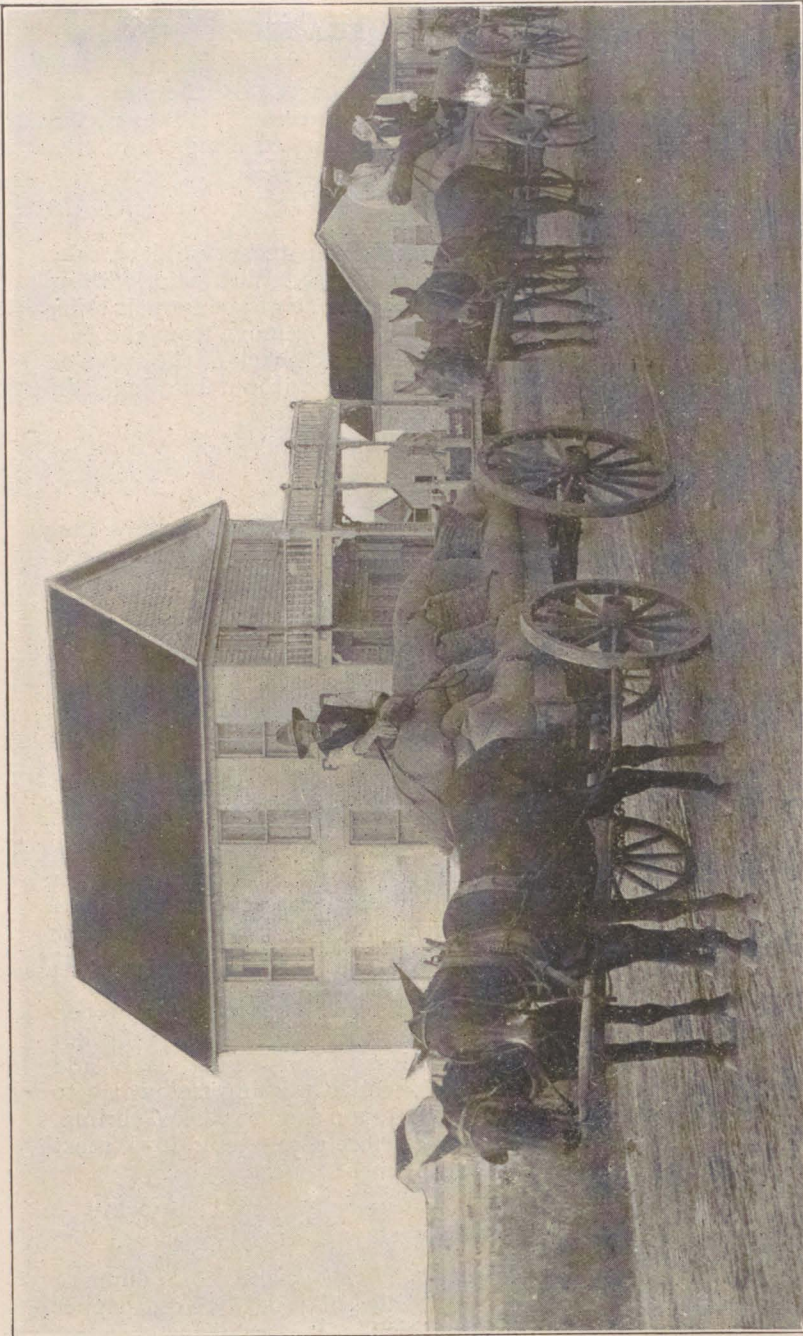
Cut one pound of pork into pieces an inch square and chop two or three onions fine; add a little red or black pepper. Put a large tablespoonful of sweet lard into a deep saucepan. When lard is hot add the chopped pork with the onions and pepper and let them brown, stirring, then add about the same amount of chopped ham as you have of pork, and a quarter pound of chopped Vienna sausage, and anything you like to flavor. When all are nicely browned, add two quarts of hot soup stock or hot water. Let it cook about ten minutes; when boiling nicely, add cup of rice. Let boil until rice is tender, stirring frequently to keep from burning. Instead of meat, you can use cooked shrimp, fresh or salt fish (if salt fish, cook before using), cold fowl, roast beef, mutton, liver or any kind of meat.

#### Creole Jambalaya.

One and one-half cups of rice (well washed), 1 pound of fresh pork, 1 pound of sausage, 1 slice of ham,  $\frac{1}{2}$  of red pepper (remove seeds), 1 large tomato (this is a matter of taste), when in season 2 or 3 sweet bell peppers, 1 large onion (cut fine), 1



Loading Rough Rice in Cars—Sunset Route



Hauling Rice to Warehouse—Sunset Route

clove of garlic (minced), 3 sprigs of parsley, 1 sprig of thyme, 2 ground cloves, bay leaf (crushed), 1 tablespoon of butter.

Cut pork and ham in very small pieces, the sausage in rather large slices. All the rest of the ingredients minced. Brown carefully the onion and pork in the butter. When a light brown add the ham with the other seasonings and brown together for five minutes. Then add the sausage and let cook five minutes longer, stirring constantly. Add three quarts of hot water or preferably stock. Let boil for ten minutes and then add the washed rice and let boil for half an hour or until firm.

This is real Jambalaya. But the average southern housekeeper does not make such an elaborate dish of it. The Jambalaya being a method of using the left-overs. It is a favorite way of finishing up the ham scraps with scraps of veal and beef. Chicken, sausage, shrimp and oysters all make good jambalaya, which is a name for cooking rice in a very rich stew or broth.

### GUMBO.

Six large crabs, 1 pound of shrimp (about 18 or 20), 3 dozen okra (sliced fine), 1 large cup of tomatoes (cut up fine), 1 large spoon of lard and flour, 1 large onion (cut up fine),  $\frac{1}{2}$  clove of garlic (minced), 3 or 4 sprigs of parsley (minced), 2 bay leaves, 1 small sprig of thyme, 1 red pepper (remove the seeds).

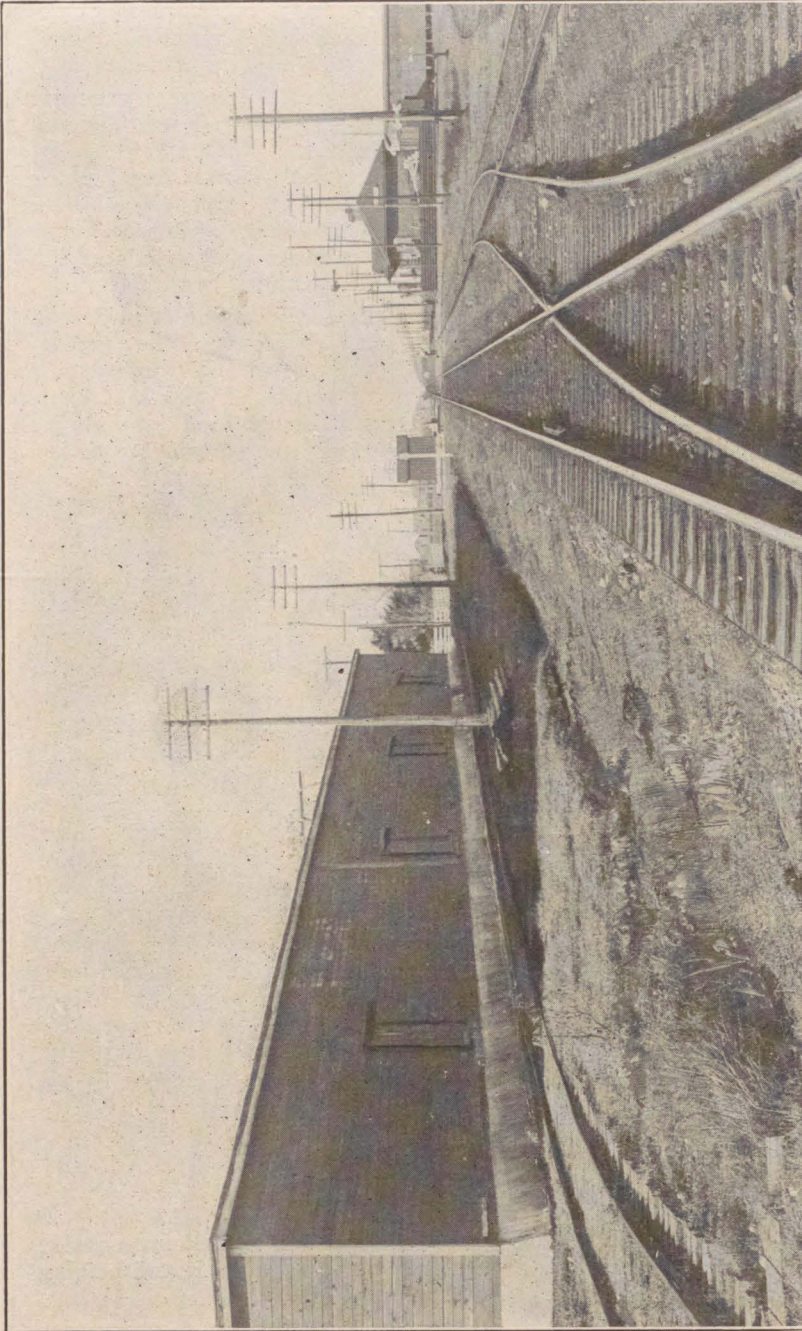
Put lard in large soup pot, and when boiling hot add flour, brown slightly and then add onion and garlic, then the crabs quartered, then the okra, sliced very fine, then the tomatoes, parsley, bay leaves, etc., lastly the shrimp. Let all stew together for at least twenty minutes, stirring constantly to avoid scorching. Add two quarts of hot water and simmer for at least an hour. When done add salt to taste. Serve with a spoonful of boiled rice in each plate. Ample for six or seven people.

Some persons never serve Gumbo without ham. If used, cut up a slice fine and fry in lard before the addition of the flour. If file is used instead of the okra, add a teaspoon just before serving after letting it come to a good boil. A pound of veal (cut in small pieces) is also added to the above recipe by many.

Chicken Gumbo is made in the same way, substituting for the crab and shrimp a fine, fat chicken, fried previously.

### Rice Soup.

Add a cup of boiled rice to one quart of heated soup-stock. Stir until it comes to a boil, season with pepper, salt and parsley or anything you like.



Rice Warehouse—Sunset Route

#### Consomme of Rice.

Take canned or home-prepared consomme or stock; heat it and pour over boiled rice No. 2.

#### Rice and Tomato Soup.

Brown carefully in a saucepan a spoonful of butter and a spoonful of minced onion. When a golden brown add a quart of tomatoes cut up fine and let stew thoroughly. Pass through a sieve to remove seeds and peeling. Add the tomatoes to two quarts of beef stock. When boiling hard add a half cup of well-washed rice and let boil for fifteen minutes or until rice is soft. Chop up fine or pass through a meat cutter some of the soup meat and add to the soup.

A half cup of rice well washed, added fifteen or twenty minutes before serving the soup, makes a pleasant change from barley, vermicelli, etc., the usual thickenings employed to vary the soup menu.

Many soups, after serving, can be improved by adding a spoonful or two of hot boiled rice.

#### Rice With Vegetables.

Place a soup bone in three quarts of water for one hour. Let it gradually simmer for two hours. One-half cup each of chopped onion, cabbage, carrot, tomatoes or any vegetables desired, three cloves, a pinch of cayenne, red or black pepper, and one and one-half teaspoonfuls of salt. Add these to the simmering meat and let boil; then add a cup of cooked rice. Boil, stirring occasionally. When the kettle is closely covered there is little need of adding water; if it is necessary to use more water, it must be boiling.

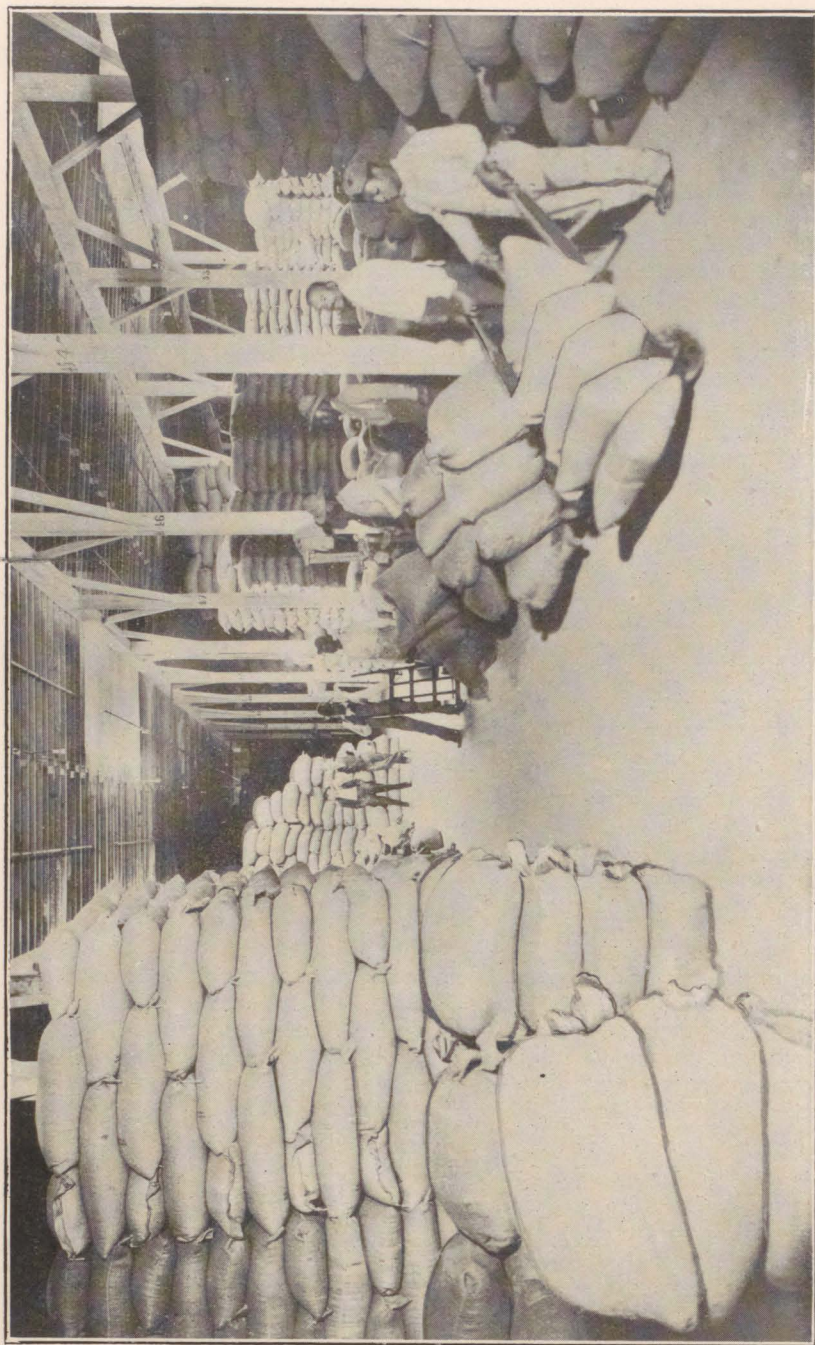
#### Rice and Tomatoes.

Stew in a pint of water seven or eight large tomatoes with a half pound of bacon, half an onion (cut up) and a teaspoonful of salt, until tomatoes are nearly cooked. Add a pint of rice that has been thoroughly washed and boil or steam until the rice grains are soft. Stir occasionally with a fork to keep tomatoes mixed. Serve either plain or with gravy.

#### Okra Pillau.

One quart of okra, one pound of bacon, half an onion. Slice the bacon, cut up the okra and onion as for soup and fry together until light brown. Then put in a little over one quart of water and add a pint of washed rice. Boil or steam all together until the rice is well done. Stir and take up with a fork.





Interior of Rice Warehouse—SunsetRoute

### Chicken and Rice.

Wash well one-half cup of rice, and steam it with a cup and a half of milk; cook until the milk is all absorbed, and the rice soft; add a pinch of salt and white pepper, a tablespoonful of butter and a beaten egg. Mix well, and spread as lining in small custard cups or muffin pans. Have the chicken chopped fine, well seasoned, and wet with gravy or warm milk. Fill the centers of the pans, cover with rice and bake in a pan of boiling water in a moderate oven. They must cook about twenty minutes. Turn out on a platter, garnish with chopped parsley and hard-boiled eggs, and surround with white sauce.

### Japanese Enshi.

A cup of cooked rice; when boiling add any salt fish; cook until done, turn out on a platter and pour over it a mayonnaise. Any cooked fish will answer in place of salt fish.

### Red Beans and Rice.

(A famous Creole combination.)

Soak over night or for at least six hours a pound of red beans. Then simmer for at least four hours in two full quarts of water. The beans will then be quite soft, when add a teaspoon of salt, a teaspoon of butter (or half lard and half butter), a small onion (minced), and half a red pepper, and the simmering process continued for two hours longer.

A pound of salt meat (scalded) is often substituted for the above seasoning not excluding the onion. The minced onion entirely disappears in the simmering and makes a delicious seasoning.

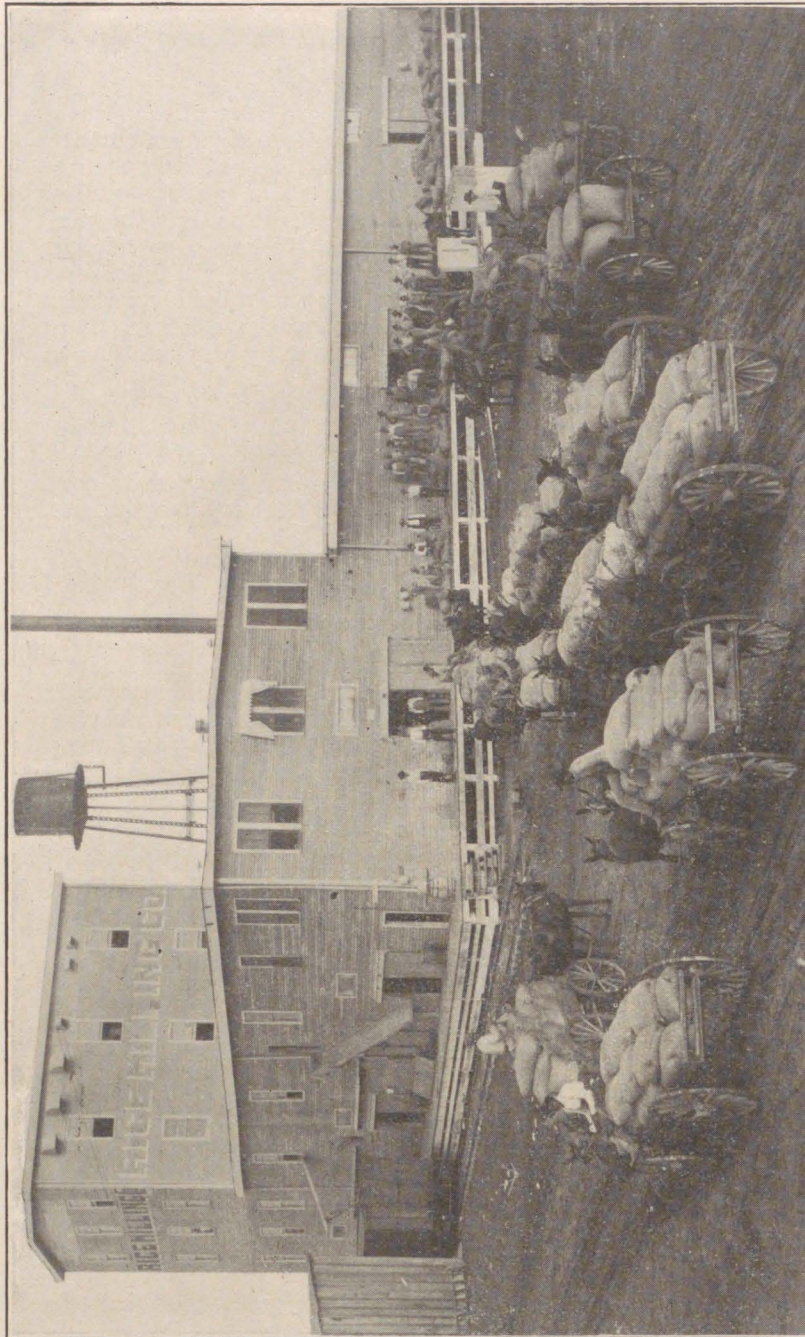
Serve with boiled rice, and the combination is not only good but represents a perfect food value—a complete ration.

### Rice Egg Balls.

Boil hard five eggs, remove the shells and put through potato ricer or a sieve, with an equal amount of boiled rice. Season with salt, pepper and butter. Make into balls and dip into raw egg; then put in crumbs, and fry in deep, hot fat. Drain and place on small pieces of buttered toast, and pour over the whole melted butter.

### Rice Omelet.

Beat separately three eggs, add to the yolks one-third cup of milk, one-half cup of rice, two tablespoonfuls of butter, little salt and pepper, and lastly the whites. Cook over a gentle fire.



Hauling Rice to Mill—Sunset Route

#### Fried Rice.

A cup of cold rice heated in milk or water. While warm stir in two eggs and a piece of butter. Make into small cakes, roll alternately in cracker crumbs and white of eggs or butter, and fry in deep, hot fat.

#### Rice and Toasted Cheese.

Cut squares of cold boiled rice and fry in butter until a rich brown. Cut cheese into squares about half as large, hold on a fork to the fire, and when softened place quickly on the square of fried rice.

#### Fruit Croquettes.

Cup of boiled rice, half cup of flour, teaspoonful of baking powder; moisten and thoroughly mix with a beaten egg and milk enough to make it as thick as biscuit dough. Grease a plate, and on it put a large spoonful of this mixture, spreading it to a half inch in thickness. Upon this put any fresh fruit, such as sliced apples, peaches, pears, cherries, blueberries or any kind of cooked fruit; bring over the edges and pinch together. Lift on a ladle and roll alternately in egg and crumbs, then drop in deep, hot fat and fry. Serve with powdered sugar and cream.

#### Rice Fritters.

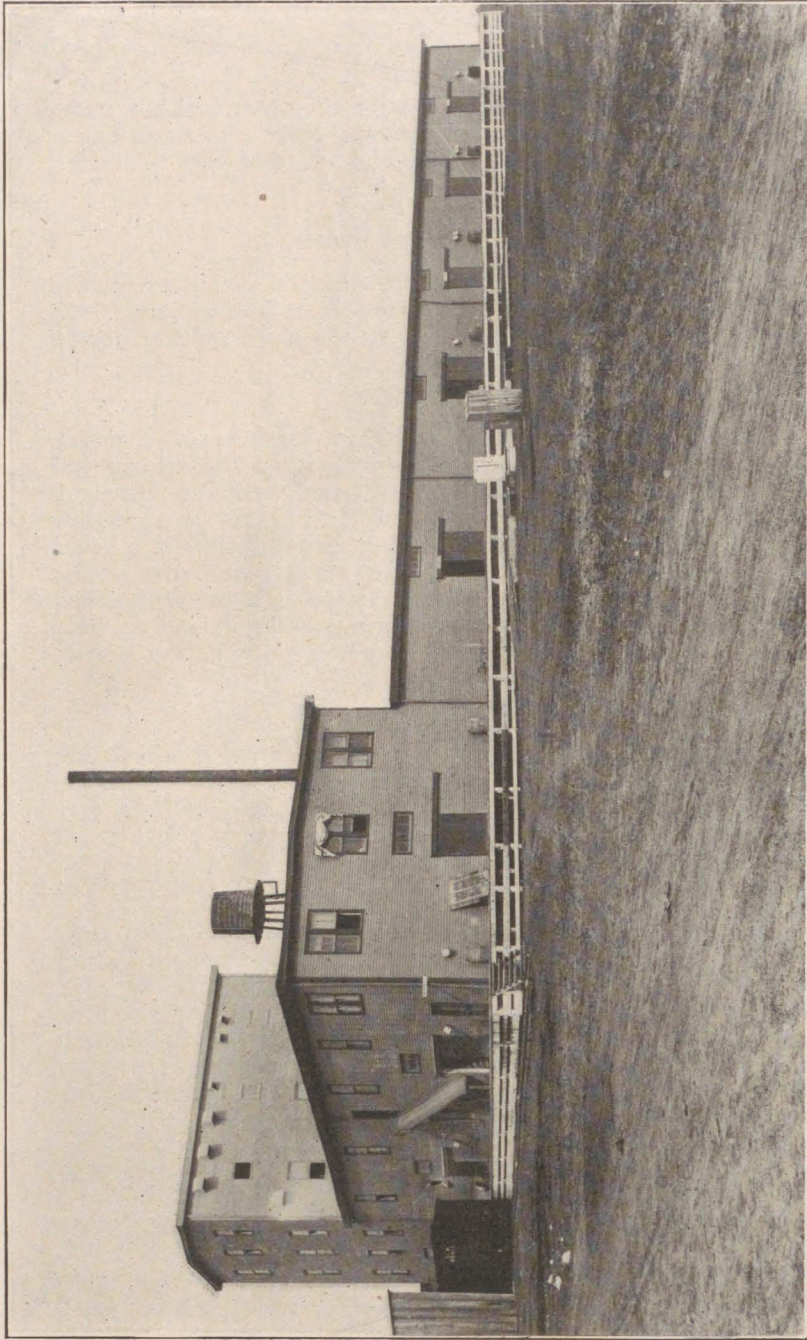
One cup of boiled rice, one cup flour, one cup milk, three eggs, butter half the size of an egg. Place teaspoonful of lard in the skillet, drop into it the mixture, being careful to keep each separate. Turn with a griddle-cake shovel and serve with maple syrup.

#### Rice Snowballs.

One cup of rice, boiled and cooled; whites of three eggs; three spoonfuls of sugar and one teaspoonful of melted butter; mix thoroughly and form into balls. Set onto a flat, low dish, place in the oven and bake without browning about ten minutes. Pour over this whites of three eggs, beaten dry, to which three teaspoonfuls of pulverized sugar and a half teaspoonful of lemon extract are added. Set in a cold oven to just dry and not brown, and serve with whipped cream.

#### Rice Gems.

Take a pint of boiled or steamed rice left from dinner, cover with water over night. In the morning add one pint of wheat flour, two eggs and a teaspoonful of butter, salt, yeast powder and milk enough to make it the consistency of custard. Bake in patty pans.



Rice Mill—Sunset Route

#### Rice Flour Gems.

Separate an egg and beat the yolk until light. Then add one cup of buttermilk or one cup of sour milk (if sour milk is used, add more butter); stir into the milk a teaspoonful of soda and a half teaspoonful of salt; beat and add one cupful of sifted rice cake flour; beat until thoroughly incorporated, then fold in the beaten whites of the eggs. Bake in heated gem pans fifteen minutes.

#### Rice Flour Bread.

Two cups of buttermilk or sour milk. Stir into this one and one-half teaspoonfuls of soda and a saltspoonful of salt; then add two cupfuls of sifted rice flour and a large teaspoonful of melted butter; beat two minutes and pour into a buttered tin can or pail having a tight cover. Set into boiling water and boil continuously for two hours. Always replenish the kettle with boiling water. This comes out a rich brown loaf.

#### Rice Flour Steamed Bread.

Into two cups of buttermilk or sour milk stir one and one-half teaspoonfuls of soda; a heaping saltspoonful of salt and tablespoonful of sugar; then add two cups of rice flour, a teaspoonful of melted butter (using more if sour milk is used) and a cup of washed and dried currants or any other fruit, cherries being preferred. Thoroughly mix and pour into a well-buttered can or pail, which has a tight cover. Set in boiling water and boil continuously for two hours. Add boiling water to the kettle as needed.

#### Rice Oven Bread.

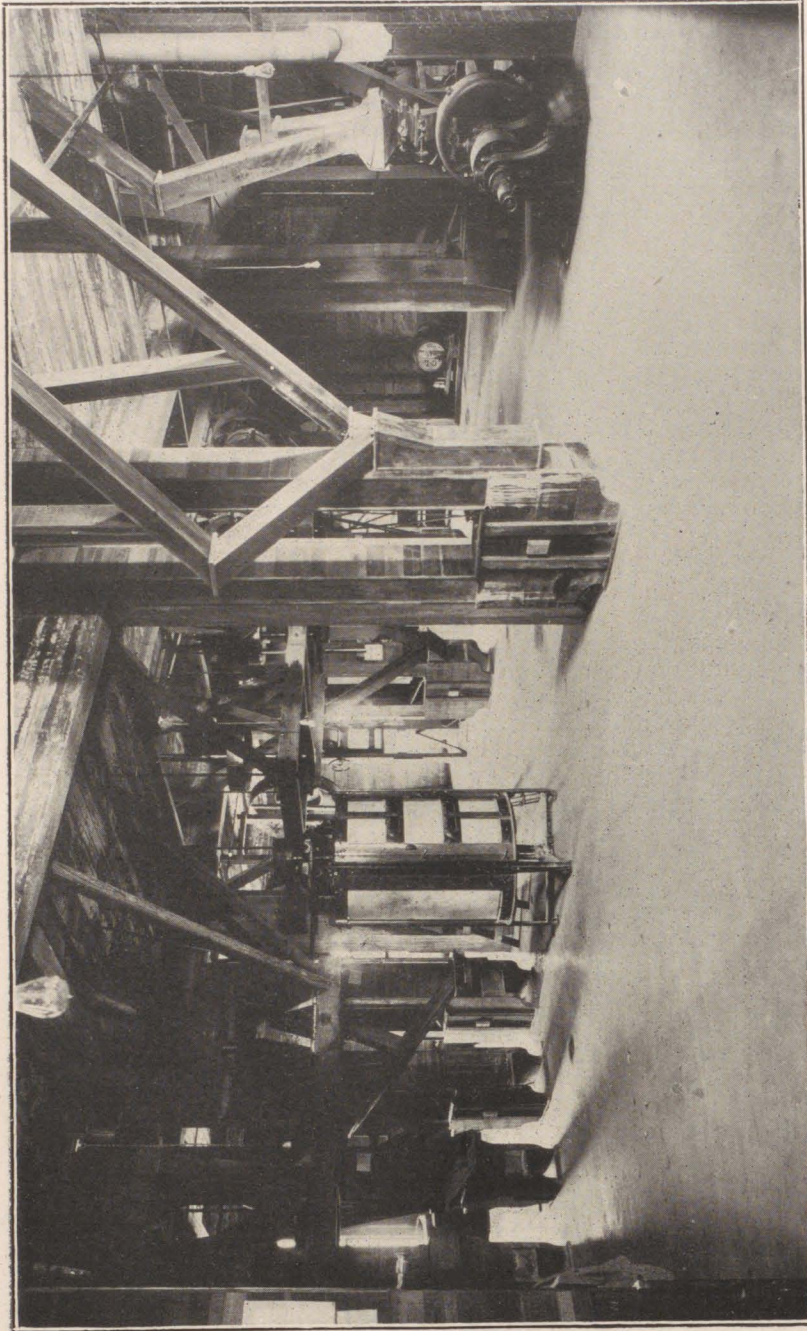
One-fourth of a pound of rice boiled very soft, three-fourths of a pound of wheat flour, one gill of yeast, one gill of milk and a little salt. Bake in a pan in a moderate oven.

#### Rice Flour Muffins.

One and one-half cups of rice flour, two cups of wheat flour, a little salt, one and one-half tablespoonfuls of baking powder; sift these thoroughly together and add one pint of sweet milk and a little butter, and one well-beaten egg. Bake in muffin ring or gem pans.

#### Custard Pudding.

Mix together one cup of cooked rice, four well-beaten eggs, one small cup of sugar, a pinch of salt and a little grated nutmeg. Add two cups of milk, let it get hot on top of the stove, then



Interior Rice Mill—Sacking and Hull Grinding Rice

bake in a moderate oven till firm. Make a meringue with the whites of two eggs and two tablespoonfuls of white sugar and spread over the top; brown in the oven.

#### Rice Custard.

One cup of boiled rice, 2 eggs, 2 cups of milk,  $\frac{1}{2}$  cup of sugar, a teaspoon of butter, vanilla or nutmeg to taste.

Beat eggs and sugar and butter together. Pass the boiled rice through a meat grinder with a fine cutter or through a coarse sieve. Add to the beaten eggs, sugar and butter; then add hot milk and stir thoroughly. Sprinkle with nutmeg or add vanilla and bake in a pan of water until brown.

#### Rice Waffles.

One cup of cold boiled rice, pressed through a sieve. One cup of flour, half a teaspoonful of salt, tablespoonful of sugar, teaspoonful and a half of baking powder, two eggs, heaping teaspoonful of butter and sweet milk enough to bind. First rub the butter into the sugar, sift together flour, salt and baking powder; add to the sugar and butter; then add the yolks of eggs and the rice; thin this with milk to the consistency of cake batter, fold into it the beaten whites of the eggs. Have the waffle irons hot and carefully greased; fill two-thirds full, close and turn when brown.

#### Rice Pudding Without Eggs.

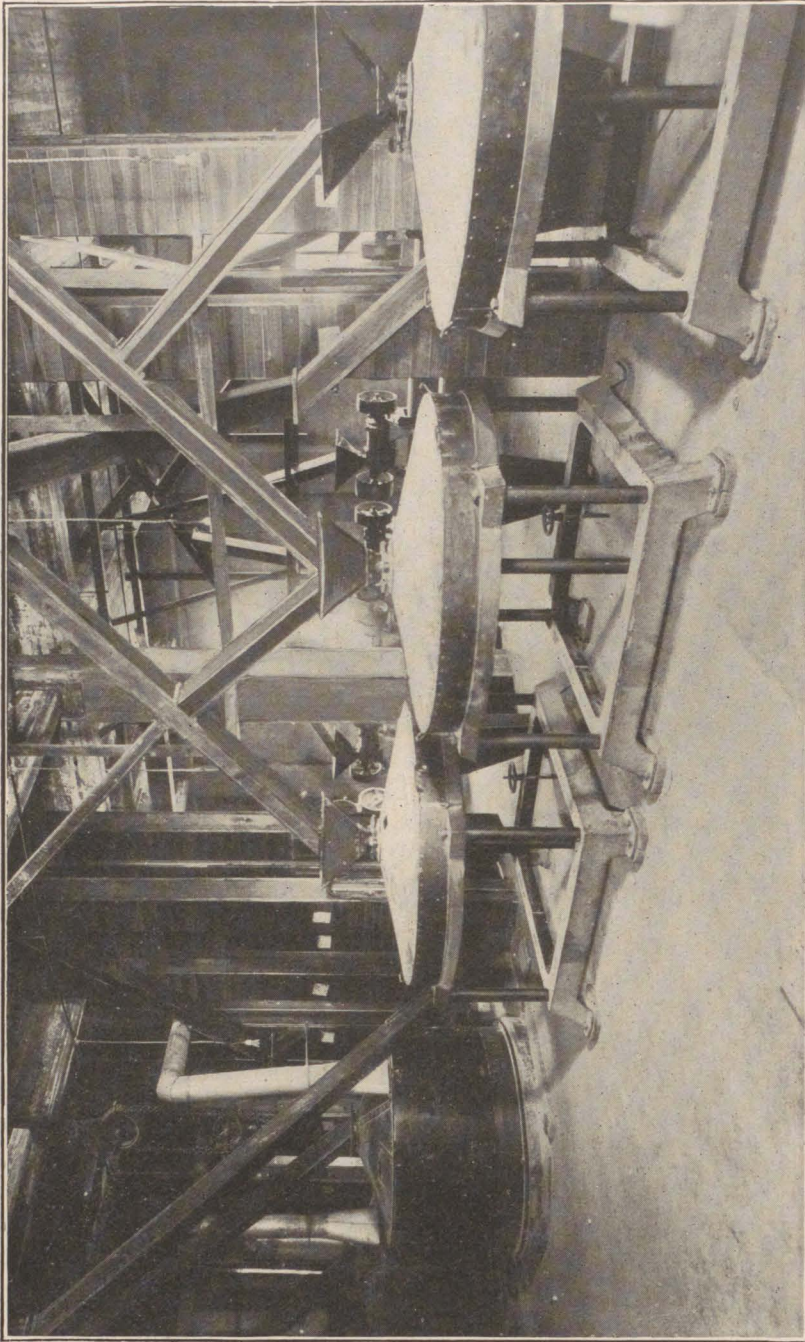
Put into a well-buttered pan half a pound of rice, well washed; pour over it three pints of cold milk, sweeten and flavor to taste; put a little butter and nutmeg over the top. Bake two and one-half hours in a slow oven.

#### Chocolate Rice Pudding.

One quart of sweet milk, three ounces grated chocolate, one cup of boiled rice, warm, one cup of sugar, yolks of four eggs. Scald together the milk and chocolate, let cool, then add to the rice with the eggs and sugar, and bake. When done, spread the well-beaten whites and four tablespoonfuls of sugar over the top and brown. Serve with whipped cream.

#### Rice Pie.

With good paste line a deep pie pan, boil a half cup of rice in half a pint of milk and water until very soft, and rub through a sieve; add half a pint of cream, three beaten eggs, a pinch of salt and a cup of sugar. Pour into the paste-lined tins and bake twenty minutes.



Interior of Rice Mill, Shelling and Hulling Rice

#### Rice Orange or Lemon Pie.

Cup sugar, yolks of three eggs, one teaspoonful of butter, three teaspoonfuls of sweet milk, two teaspoonfuls of boiled rice mashed fine, grated rind and juice of one orange or lemon; beat all together, pour into lined pie pan and bake. When done, spread with meringue of whites and sugar, and brown.

#### Rice Molasses Pie.

Stir into a cup and one-half of molasses one teaspoonful of soda until white, add one-half cup of finely mashed boiled rice, a cup of sour cream and a tablespoonful of butter, three well-beaten eggs; bake with two crusts. This is sufficient for two pies.

#### Rice Chocolate Pie.

One quart of milk, yolks of two eggs, four tablespoonfuls boiled rice, put through a sieve, two squares of chocolate melted and one cup of sugar; scald the milk in a double kettle, add the eggs, rice, chocolate and sugar, and stir until thickened slightly. Bake in under crust and cover with meringue.

#### Rice Sponge Cake.

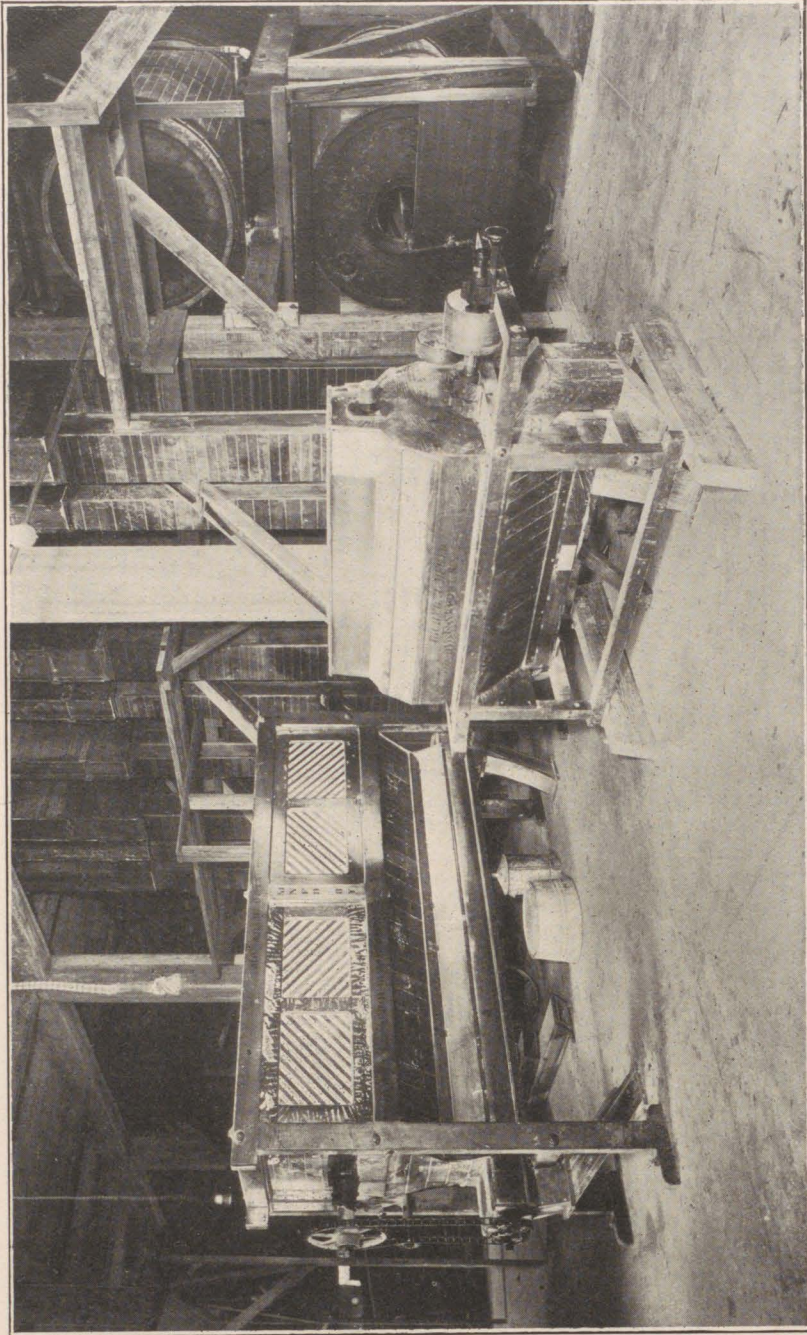
Four eggs, leaving out the white of one, two cups of sugar, three cups of rice flour, three-fourths cup boiling water, salt-spoon salt, one and one-half teaspoons baking powder, cream; sugar and yolks together, add boiling water and flour (into which the baking powder and salt have been thoroughly sifted); flavor with half teaspoon of vanilla. Put into square tin, bake thirty minutes. Frost while warm.

#### Rice Pound Cake.

One pound rice flour, half pound of butter, one pound of sugar, ten eggs, the juice of one lemon; cream the butter and sugar together, add the yolks well-beaten, with the lemon juice, then add gradually the flour (into which three teaspoons baking powder has been thoroughly sifted). Lastly, fold in the whites, beaten till dry. Bake in a moderate oven for the first half hour; then gradually increase the heat. Bake an hour.

#### Rice Flour Rolls.

Dissolve a cake of compressed yeast in two tablespoonfuls of water; when thoroughly dissolved add a cup of sweet milk and the same amount of warm water—mix before adding—making a pint of wetting (this must be warm, but not hot); also add a teaspoonful of salt; now add enough rice flour to



Interior Rice Mill—Polishing Machines and Trundles

make it a stiff batter. Upon the molding board put a bed of wheat flour, and on this knead the rice mixture to a firm loaf. Knead it ten or fifteen minutes, adding flour as is required; then put it into a well-greased bowl; brush the top over with butter, cover closely and stand in a warm place; let it rise about three hours. Again place it upon a molding board; make it into rolls, place in a pan, brush over with butter and let rise until twice their size—about one hour. Bake in a quick oven twenty-five or thirty minutes.

#### Rice Floating Island.

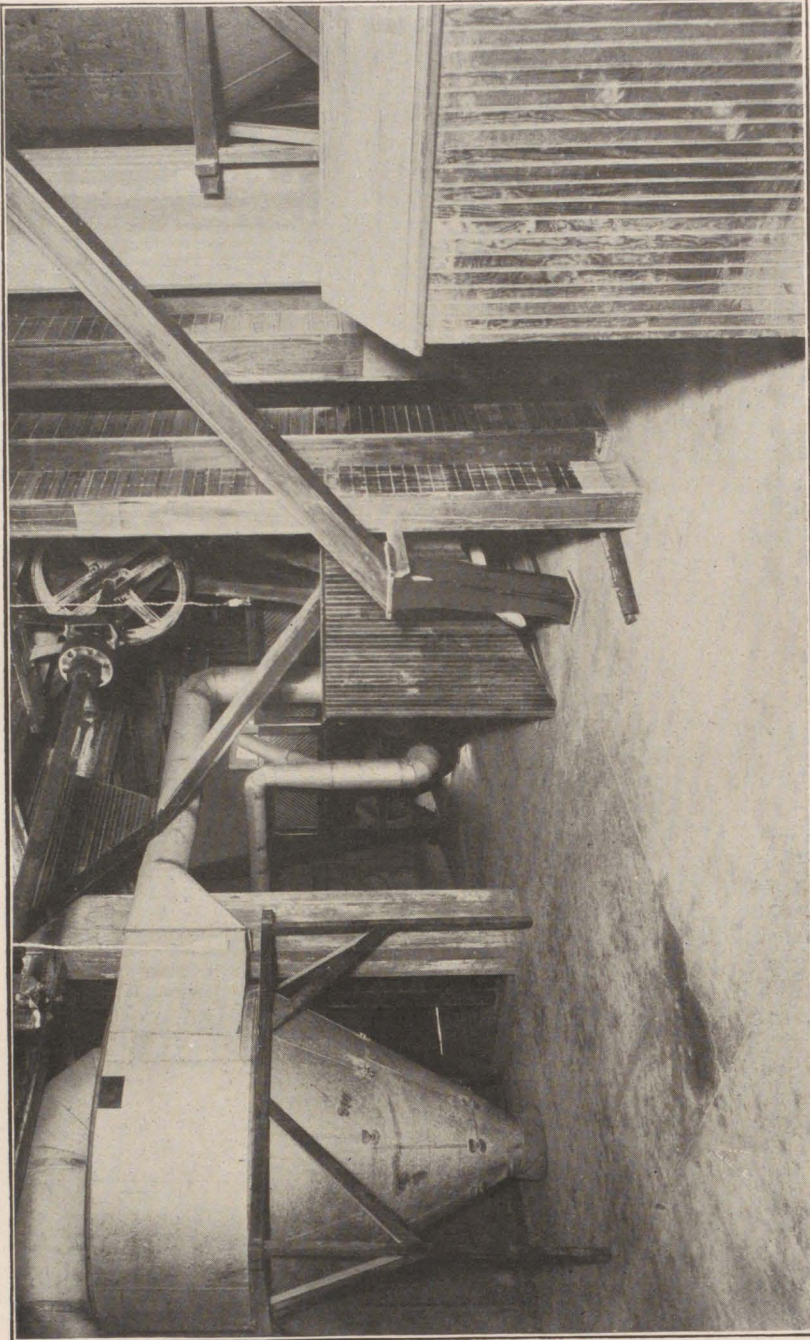
One cup sweet milk, one tablespoonful melted butter, one and one-half tablespoonfuls of sugar, a pinch of salt, the yolk of one egg, beaten, and a half cup of rice flour cooked together ten minutes. This forms a soft custard. As soon as cooled a little, pour into a deep glass dish and set away to cool. Beat the whites of two eggs to a stiff froth, sweeten with two spoonfuls of pulverized sugar, adding a little extract, place in spoonfuls over the surface of the custard, and upon each of the islands put a small piece of currant jelly.

#### Rice Flour Steam Pudding.

Beat the yolk of an egg in a bowl; add a cup of buttermilk in which a teaspoonful of soda has been stirred; a teaspoonful of salt, a tablespoonful of sugar and a tablespoonful of butter. Into this mixture stir a cup of rice flour. Beat, then add beaten white of egg. Pour into a well-buttered tin can or pail a part of the mixture, then add more butter and more prunes, using for this quantity of butter about a dozen prunes. (But any other fruit can be used, as bananas, peaches, or, best of all, cherries.) Cover the can closely, set it in boiling water and keep boiling two hours or more. When ready to serve, open the can and turn out the rich brown loaf. Cut it into slices and serve with the following sauce:—To one cup sweet milk, put in a basin and heated, add a teaspoonful of sugar, a tablespoonful of butter and a pinch of salt. Wet one and one-half tablespoonfuls of rice flour with a little milk, stir into the milk and cook fifteen minutes. Remove from the stove and season with the milk and cook fifteen minutes. Remove from the stove and season with extract.

#### Rice Flour Blanc-Mange.

Take four ounces of rice flour, three ounces of sugar, a little extract, with two ounces of fresh butter; add one quart of milk, boil from fifteen to twenty minutes, till it forms a smooth paste, not too thick; then pour into a mold, previously buttered; serve when cold with cream or preserved fruit.



Interior Rice Mill—Bolting Rice

#### Rice Invalid Dish.

Butter a common glass (previously warmed) and line with warm, boiled rice; into it pour the stiffly beaten white of an egg, to which a pinch of salt has been added; on the top lay the unbroken yolk. Set the glass in warm water, let come to a boil and cook just long enough to set the white. Lay a doily on a small plate and set the glass on this, and put beside it a piece of dry toast.

#### Rice Jelly.

Mix a heaping tablespoonful of rice flour with enough cold water to make a smooth paste; add a small pint of boiling water; sweetened with two tablespoonfuls of sugar, and boil until clear, flavor with lemon juice and mold.

#### Rice Water.

Mix one tablespoonful of rice flour with enough cold water to make a smooth paste; add two pints boiling water; sweeten and boil till clear. Cool on ice and serve quite cold, but not iced.

#### Rice Water for Babies and Invalids.

Boil one cup of well-washed rice in three-fourths of a gallon of water until quantity is reduced to about three cups. Strain.

Serve the rice water in nursing bottle in the proportion of two-thirds rice water to one-third cow's milk. If the child is delicate or feverish and can not digest milk serve rice water alone, sweetened or salted to taste. Above directions may be reduced or increased according to need.

#### Rice Stuffings.

Cold boiled rice may be substituted to advantage wherever bread is used in stuffings.

#### Rice Border.

Boiled rice banked by spoonfuls around the dish is what is meant by a rice border.

#### Rice for Breakfast.

Boiled rice served with milk or cream after the fashion of the ordinary breakfast foods, will be found to compare favorably to any of these much-advertised cereals. Rice is coming into its own as a breakfast food. And why not? When it is the easiest cereal to digest, the most nutritious and a great heat producer.

It is destined to take its place at the front rank of ready-cooked dishes for the early meal. It took the manufacturers of such foods a long time to "discover" rice, but it is here to stay. Puffed Rice and Toasted Rice Flakes made by different manufacturers are now to be found for sale anywhere. The latter has an agreeable pronounced taste which makes it appetizing even when eaten alone.

## RICE RIPPLES

A barrel of rough rice weighs 162 pounds.

The commercial standard weight of "rough rice" is 45 pounds to the bushel.

A barrel of rough rice contains about 4 bushels.

In Texas and Louisiana rough rice is generally bought and sold by the barrel.

Rough rice from the threshing machine is handled in bulk and also in sacks or bags which average from 180 to 200 pounds each.

A "pocket" of clean or milled rice contains 100 pounds. In the world there are said to be over 1,400 varieties of rice.

Honduras and Japan are the two varieties of rice at present grown in Louisiana and Texas. Honduras produces the long grain and Japan the short or round grain or kernel.

An experienced rice grower states that a barrel of rough Honduras rice, No. 1 grade, should yield about as follows:

57 pounds.....	Fancy head rice.
27 pounds.....	Second head rice.
15 pounds.....	Screenings and Brewer's or broken rice.
33 pounds.....	Hulls.
25 pounds.....	Bran and polish.
5 pounds.....	Shrinkage.

162 pounds.

A higher percentage of fancy head rice than the above is obtained from Japan rice.

Rice is the most profitable of all the staple crops grown and is the least subject to failure.

"Rice forms the principal food of one-half the population of the earth. It is more widely and generally used as a food material than any other cereal."—Farmers' Bulletin No. 110, U. S. Department of Agriculture.

The latest estimate places the world's rice crop at about 175,000,000,000 pounds and the wheat crop at about 190,000,000,000 pounds.

Rice is a necessity, not a luxury.

Rice should be called "the staff of life." It is the principal food of 700,000,000 people of Asia and the terrible fighting power of the Japs proves its stability.

When buying rice ask for domestic rice. The rice imported from foreign countries is of inferior quality and often adulterated.

The best requisites for making beer are barley, rice, pure water and hops. Rice (unlike corn products) contains no fusil oil or other deleterious properties which cause biliousness.

Coffee made from parched rice has been successfully used during epidemics of cholera and it is highly recommended for dysentery and diarrhoea.

"The soil and climatic conditions in Southeastern Texas are almost precisely like those in Southwestern Louisiana. Rice culture in these sections requires no separate treatment, what is applicable to one applies also to the other."—Farmer's Bulletin No. 110, U. S. Department of Agriculture.

Several varieties of "upland" or "dry land" rice, which can be grown without irrigation, are in process of introduction.

As the consumption of rice increases so will the price to the consumer decrease.

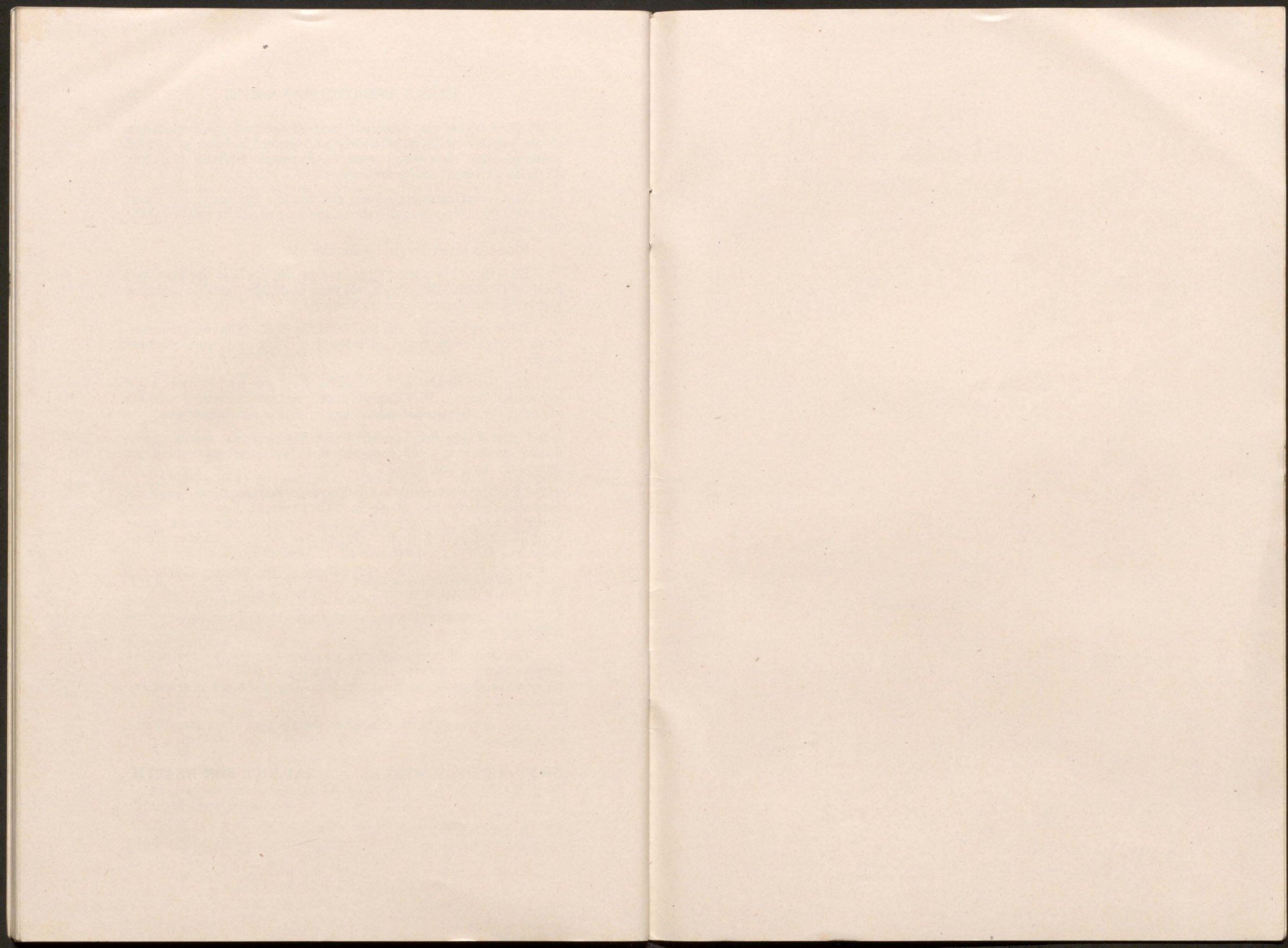
The limit of profitable rice growing will not be reached as long as there is stock to fatten or people to feed. There can be no over-production in this world as long as there is a hungry man in it.

Rice restores the system after the ravages of dyspepsia and indigestion.

**GROW RICE FOR WEALTH**

**EAT RICE FOR HEALTH.**





# TEXAS AND LOUISIANA RICE



ISSUED BY  
PASSENGER DEPARTMENT  
SUNSET ROUTE  
NEW ORLEANS—HOUSTON