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A WEEKLY PAYMENT LAW IN NEW YORK.

Complaints have often been made of the inconvenience to which employes in manufacturing establishments are subjected by the irregularity and delays in the payment of wages earned. To correct abuses in this direction, a new law has been passed by the legislature of the State of New York.

The provisions of the law are very sweeping. Every manufacturing, mining or quarrying, lumbering or mercantile, railroad (surface, street, electric, and elevated), except steam surface railroads, steamboat, telegraph, telephone, and municipal corporation, and every incorporated express and water company, must, after July 1 next, pay weekly each of its employes. If any employe shall be absent on the regular pay day, he shall be entitled to the money due him upon demand. The penalty for failure to comply with this law is fixed at not more than \$50 nor less than \$10 for each violation. Actions for violations must be begun within thirty days.

The factory inspectors are empowered to begin suit against any corporation which fails to observe the law two weeks after notification. On the trial of the action the defendant shall not be allowed to set up as a defense other than a valid assignment of wages, the absence of an employe on pay day, an actual tender of payment to an employe, a breach of contract, or a denial of employment. No assignment of future wages shall be valid if made to the employing corporation or its agents, and corporations are forbidden to require any agreement from any employe to accept wages at other periods than this law contemplates.

RICE CULTURE.

It is said that rice furnishes the principal food of three-quarters of the human race. Originally a native of the East Indies, it is now cultivated in all quarters of the globe where the conditions of warmth and moisture are suitable. Governor Alston, of South Carolina, stated in an agricultural address delivered in 1854 that a ship from Madagascar came into Charleston harbor about the close of the 17th century, and left rice seed there which was planted and prospered. Another account of the origin of rice culture in this country states that it was first grown by Sir William Berkeley, in Virginia, as early as 1647.

In 1666 the advantages offered by the lowlands of South Carolina for the cultivation of this grain were noted by agents of the English interested in the settlement and improvement of the new world, and they stated in their report that "the meadows are very proper for rice, rapeseed, linseed, and many of them be made to overflow at pleasure with a small charge."

Following the introduction of rice in this country its cultivation extended throughout most of the southern States of America, and it has also been successfully grown in Tennessee and Missouri.

The Carolina rice fields are subjected to extreme irrigation, and in fact swamp lands were considered the best for the cultivation of the cereal, but lands which are subject to tidal overflow of fresh water have latterly been found to give the best results.

In Louisiana the method pursued is very similar. The planter locates on ground having an inclination backward from the river. In the case of the Mississippi, the water rises above the level of the rice fields, from which it is protected by the levees. The planter is allowed to cut openings in the levee, which are called flumes, through which the water passes to the rice fields. The flumes are arranged with gates which can be opened or closed at will, and thus the discharge of the water is regulated. The water after passing through the flumes flows into ditches which are supplied with laterals, which divide the field into sections and are supplied with dams, and these secure the distribution of the water as it is needed. Methods of irrigation vary in different localities, but the ditches are usually five feet deep and of about the same width, while the principal canal is sometimes wide enough to be used for transportation between the fields and the barns.

Very serious objections are made to the practice of piercing the levees for the purpose of irrigating the rice fields, as it has been shown that the aperture made for the location of a flume frequently causes a serious break in the bank, which results in flooding the neighboring country. The difficulty could be overcome by dispensing with the use of flumes and employing pumps for taking the water from the river and placing it in the ditches.

The ground is plowed or dug over with a hoe early in the winter, and at certain times when the weather is favorable it is covered with water. During March the land is kept dry, the clods are broken up, and the surface is smoothed off with harrow or hoe. The manner of planting the seed varies according to locality. In some cases seed drills are used, and in others trenches of from 3 to 5 inches in width are prepared with a hoe made for the purpose, and these trenches, in which the seed is placed, will be from 13 to 15 inches apart from the center. In still other cases the seed is sown broadcast, and the larger part of the planting is done during March and until the middle of May. The

amount of seed required is 2 to 2½ bushels to the acre. The drills cover the seed as it is dropped into the earth, a hoe is used to cover it lightly with earth when it is sown by hand in the trenches, and it is harrowed in when sown broadcast. After the seed is thus planted the water is let in through the gates and remains upon the land from four to six days or until the grain swells and commences to sprout. Sometimes the seed is not covered with earth when sown, and it is then prepared by stirring it in clayey water and drying it when enough clay adheres to keep it from floating off when the water is let on. Where the seed is covered with soil, two floodings at sprouting time are required; but where the process of mixing the grains with clayey water is pursued, but one flooding is necessary.

Seed prepared in the manner just stated has been sown upon the surface of the water, the clay adhering to it, sinking it to the bottom, where it took root and grew.

The water, after standing from four to six days on the sprouting rice, is drained off, and when it is five or six weeks old, where the grain has been sown in trenches, the earth is stirred with hoe. This is repeated ten days later, and then what is called the "long water" is put on for about two weeks, which is kept at a considerable depth for four days, and then is made to diminish gradually. After the water has been drawn off about eight days and the field has become dry, it is hoed to a considerable depth. When a joint appears on the plant the land is lightly hoed again, and then what is known as the "joint water" is put on, which remains until the grain matures, which requires about two months. During the time that the water is upon the crop it has to be frequently renewed, as the evaporation is very great. Much care has to be taken that no salt or even brackish water reaches the growing crop, as it is fatal to it. In localities where the water used in irrigation is likely to be impregnated with salt by the incoming tide from the ocean, men are stationed at the flumes, who taste the water as it flows through, and the moment salt is discovered the gates are closed. While the water is upon the crop the hands are obliged to wade about in it and pull up or destroy the weeds or grapes, which grow luxuriantly in the rich soil. The maturity of the grain is indicated by its turning yellow, and a few days before the harvesting commences the water is drained off.

Rice grows to a height of from four to five feet, and it is cut about eighteen inches above the ground, and is spread upon the stubble to cure, which generally takes about twenty-four hours. In cutting the grain, the sickle is used, also the cradle, and the attempt has been made to employ reaping machines, but they have been found to be too heavy to run upon soil made soft by irrigation. It is thought, however, that a lighter machine with a broad-tired wheel might do the work successfully.

Rice is also grown on uplands and without irrigation, and the grain thus obtained is in some respects superior to the lowland product, although the upland and lowland rice are of the same species, the differences being but modifications of the varied cultures, which differ with the soil and the localities. In cultivating upland rice, the best results are obtained where it is sown in rows like foddercorn, where it can be hoed and kept free from weeds. It is also sown broadcast like wheat, oats, and other grains, and in loosening the soil and freeing it from weeds, an implement about half the size of a scythe is used, and which is called a grasping knife. The method of reaping the upland rice is similar to that which has already been described. Upland rice yields from twenty-five to forty bushels to the acre, and lowland, where irrigation is used, fifty to seventy-five bushels to the acre. One great advantage of lowland culture is that the lands thus used would not yield any other crop, and the area of land in the South which might be devoted to the culture of rice is almost unlimited in extent. When fully cured, rice may be said to occupy in appearance a position intermediate between barley and oats.

The grain is thrashed by machines usually run by horse power, the old-fashioned flail being now but little used. When it comes from the thrasher it is known as rough rice or paddy, and requires grinding to free it from the hulls, according to the following method. After the rice is screened from sand, it is passed through buhr stones about five feet in diameter, to grind off the husks. These stones are not grooved like ordinary mill stones, but have level faces, set as far apart as the length of the grain, with concave depressions in the center where the grain is fed, the stones revolving at a speed of about two hundred.

When the grain is fed in, the centrifugal force sends it circling to the periphery, and each grain, revolving on its shortest axis, in accordance with a well-tested principle of philosophy, travels upright between the stones, the mass moving like battalions of Lilliputians on the march, and the stones strip off the husks of all the grains touched, the short grains escaping unhulled. The grain is next fanned to drive off the separated husks and then taken to the mortars, where it is heavily beaten to remove the husks from the shorter grains and such others as have not been completely cleaned by the