FREAK OF A LIGHTNING BOLT

Louis Martin of Riverton Killed While Standing Beside His Brother.

LATTER DID NOT FEEL THE SHOCK

John Borrall of Butte City, Neb., Fatally Injured While Hunting on Snake River Friday—Expired in a Few Hours.

RIVERTON, Neb., Sept. 16.—(Special Telegram.)—Louis Martin, a respected citizen of this vicinity, was killed by lightning this afternoon. He was leaning on a wire fence, elbow to elbow with his brother, and the latter did not feel the shock. The deceased leaves a wife and four young children.

Schuyler Affairs.

SCHUYLER, Neb., Sept. 16.—(Special.)—Frank June of Whitman, Neb., a telegraph operator, is here among relatives and friends.

Stephen and Emil Dworak visited their father at Verdigris this week.

The Bohemian publication at Schuyler, Svit, has proved so unprofitable that the publishers, F. K. Ringsmuth and Joseph Priborsky, have decided to discontinue it and move to Cedar Rapids, Ia. This is the third publication under charge of Mr. Ringsmuth that has had to subside since 1889, the first being the Nova Doba and the second the Kolov. Mr. Ringsmuth is an able and energetic man, but lack of patronage has pulled him down.

After some weeks of dusty streets because of trouble in letting contract for sprinkling, relief was begun last week by J. H. Fulmer, who secured the job at $46.90 per week, which is 53.10 less per month than was paid heretofore.

A large number of dressed stone street crossings are being substituted for the old plank ones.

Some of the electric lights at street intersections are being placed upon poles forty instead of twenty feet in height.

Miss May Elden of Des Moines, Ia., who has been teaching music in Schuyler during the past two years, has been offered a large class in Boone, Ia., where she goes this week. Monday evening her pupils gave a recital at the home of Mr. and Mrs. Thomas Bryant, which was very highly spoken of by those present.

The Board of Education appointed Prof. J. S. Van Eaton, the newly elected principal, E. Lamhofer and J. A. Grimison an examining board to examine the city teachers elected for this year.

Wednesday Mrs. H. W. Nieman and children, Sara and Chauncey, left for New York. Sara will enter school in Philadelphia and Chauncey in Concord, N. H.

The Zaphyr Wheel club will have a five-mile race at the coming county fair for the club championship.

Lucy P. Dodge of Peoria, Ill., is visiting Mr. and Mrs. E. H. Phelps.

Christiana Jacobsen has opened a kindergarten school at her home in West Schuyler. She has a class of fifteen.

Miss Harriett Hood of Omaha is in charge of a class in physical culture during her vacation. There are twenty in the class.

Bellevue Brevities.

BELLEVUE, Neb., Sept. 16.—(Special.)—The public schools opened Monday with a good attendance.

Miss Helen Longsdorf left Monday to take charge of the Fairview school.

Prof. G. D. Crothers, formerly of the faculty of Bellevue college, was in the village during the early part of the week, looking up old acquaintances.

Mrs. J. D. Kerr met with a serious accident last Wednesday. While driving down College hill a strap broke and the horse, becoming frightened, overturned the buggy, throwing her and her son, Ralph, to the ground. Both of her ankles were sprained and she is still suffering from the nervous shock.

Mr. Kewitt and family have removed to Omaha.

Mrs. George Burtch and daughter, Ollie, are visiting relatives in Springfield.

Prof. William Crothers, who takes Prof. Mitchell's place at the college as instructor of Greek and Latin, arrived on Thursday. Prof. Mitchell has returned to Princeton to resume his studies.

Mrs. William Hamilton and family returned from Decatur Friday.

Mr. Henry Whetstone was struck by B. & M. train No. 3 and badly hurt. The old gentleman is very deaf and did not hear the train.

Valley Notes of News.

VALLEY, Neb., Sept. 16.—(Special.)—Miss Ella Lowell of St. Paul, Minn., arrived last evening and will spend two weeks with her sister, Mrs. D. R. Brownson.

Mr. William Hart, a prominent liveryman of this place, was married Wednesday evening at Fremont to Miss Alice Whitehorn, also of Valley.

E. Esway has twelve acres of the finest onions in Nebraska. He has already shipped two carloads to Denver.

The Valley band arrived home from the state fair this morning.

Hon. John M. Thurston will address the citizens of western Douglas and adjoining counties upon political questions at the Valley opera house Tuesday evening. The Valley Cornet band has been engaged for the occasion.

The Valley Herald, Olmstead & Johnson editors and publishers, made its appearance in Valley this morning. Valley now has two weekly papers.

Charles Ackerman, living north of town, lost his residence by fire.

Mr. and Mrs. Israel Hessig of Phelps county are visiting the family of Pete Miller.

Lightning's Work at West Point.

WEST POINT, Sept. 16.—(Special.)—During a heavy rain yesterday the house of John Dienslake was struck by lightning. A hole was torn through the roof and Mrs. Dienslake was knocked down by the shock, but not otherwise injured.

The Cuming county fair will begin tomorrow. Prospects are good for a large exhibit, as more interest is being manifested by farmers than for many previous years.

The large barn of Charles Mack was destroyed by fire last evening. The fire was evidently of incendiary origin.

Work will be commenced Monday on the new creamery building. The plans are accepted for a large brick. The latest improved machinery for butter making will be purchased, and the capacity of the plant very much enlarged.

A very largely attended double wedding occurred Wednesday. County Attorney Moodie and Miss Kate Readinger and Prof. H. L. Wells and Miss Lizzie Readinger were united in matrimony. The brides are the two accomplished daughters of Judge Readinger.

Ord Personal Mention.

ORD, Neb., Sept. 16.—(Special.)—Mrs. Vincent Kokes left Saturday for Wahoo on a visit to relatives there.

Mr. H. C. Spaulding was on Omaha visitor this week.

Rev. C. C. Wilson and family, who have been visiting in Pennsylvania, returned home Friday evening.

Mrs. J. R. Williams is visiting the state fair at Lincoln this week.

Miss Hattie Winslow is visiting with relatives in Lincoln.

Mrs. Edith A. Miller of Onawa, Ia., a former resident of Ord, is visiting with Mrs. J. W. Perry.

Fatally Shot While Hunting.

VALENTINE, Neb., Sept. 16.—(Special.)—John Barrall, aged 19, who resides with his parents near Butte City, Neb., was fatally shot while hunting on Snake river Friday. He attempted to place his gun in a wagon with the muzzle reversed. He died in a few hours.

Slight Frost at Milford.

MILFORD, Neb., Sept. 16.—(Special.)—There was a slight frost on the bottom lands last night. It will prompt the farmers to complete the cutting of their corn. Many farmers in this vicinity are preparing ensilage for their stock this winter.

Lyons Residence Burned.

LYONS, Neb., Sept. 16.—(Special.)—Mrs. Neary's house, one mile west of town, caught fire last night and was burned to the ground, with all the contents, except the organ and a few minor articles.

The school house in W. H. White's district, eight miles northeast of town, was burned a few nights ago. Supposed to have been set on fire.

The town board will sell the water bonds September 28, and begin work on the water works as soon as arrangements can be made.

Mrs. W. White, one of the first settlers of this county, was buried here last Thursday.

Banker Everett and family have gone to California to spend the winter.

RULINGS ON SCHOOL QUESTIONS.

Decisions Made by the State Superintendent of Public Instruction.

LINCOLN, Sept. 16.—(Special.)—Following are some decisions made by State Superintendent Goudy on points recently submitted:

A school district cannot legally borrow money for building purposes, except by the issuance of district bonds.

A legal voter who is a taxpayer is eligible to membership on the board of education in cities.

Saloon license moneys paid under the authority of village board or city council should be equally divided among all the school districts lying wholly or in part within the corporate limits of said village or city. (See 29 Nebraska, 288, and 28 Nebraska, 254.)

The endorsement of a teacher's county certificate merely transfers it to the county by whose superintendent it is endorsed.

Children residing in "unorganized territory" cannot be legally enumerated in any school district.

The powers of the county board are limited to the fixing of the per diem of the county superintendent's pay (or to the annual salary in case of a county with salary); this board cannot determine the number of days necessary for the proper performance of the duties of the county superintendent. The county superintendent may recover from the county his claim for services rendered, at the per diem fixed by the county board, for as many days as in his judgment the conditions in his county demand.

A county superintendent has no legal right to issue a teacher's certificate upon a college diploma as evidence of qualification.

Van Wyck Lives in a Church.

Washington Special to the Chicago Tribune: Ex-Senator Van Wyck of Nebraska has given the society people here something to talk about by taking up his residence in the picturesque little church on Massachusetts avenue, just opposite the residence of Chief Justice Fuller. It is in the swellest portion of the city, and for the last few days Mr. and Mrs. Van Wyck and their daughter have made their home in the edifice formerly devoted to divine service. Mrs. Van Wyck owns the property, it having been bought by her husband and presented to her as an afterdinner favor the day they were leaving Washington for Nebraska at the conclusion of the latter's senatorial career. It has been the scene of high church Episcopal and Swedenborgian services, but lately has been idle. When Mr. and Mrs. Van Wyck came here to attend to repairs then in progress upon their other property the former suggested that they camp out in their empty church. Mr. Van Wyck, since his long illness, has a horror of mounting steps, and thought it would be a great scheme to live on the ground floor.

So they moved to the church and divided off the auditorium by imaginary lines into parlor, bedrooms, dining room, and picture gallery. Pictures they had in plenty, and a shopping expedition quickly provided the necessary furniture. The vestry was turned into a kitchen, and the shining pipes of the organ and the decorations of the chancel helped out the art gallery. Rugs, lamps, small tables, easy chairs, and sofas dot the space all around, and papers and books give evidence of their enjoyment. A big rocker under the trees which shade the porch made a resting place for the ex-senator as he sat reading or chatting. Nobody could have more fun over the fact that within easy reach hung the bell rope, a pull on which would have caused a familiar sound in that locality. With plenty of servants and every comfort possible the little household spent the last few days very pleasantly in their novel quarters, and liked it so well that it is quite probable the church will become their winter home. They intend to put up partitions and make a good many alterations to transform it into a proper dwelling, and have had plans drawn for that purpose.

Peculiar Grant County Deal.

HYANNIS, Neb., Sept. 16.—(Special Telegram.)—The democrats of Grant county met at Hyannis Saturday. A few democrats, led by T. E. Lynch, nominated ex-County Judge Crandall for county attorney, passed free silver resolutions, endorsed Bryan and elected T. R. Lynch, an administration democrat, as a delegate to the state convention.

PROVIDENCE IN THE WEST.

The Judge Got Into a Ditch, but it Wasn't His Last One.

"Yes, we have an adventure now and then out in our country," said Judge Thompson of Wyoming. "If you'll come out and see us I'll refer you to five or six men whose hairbreadth escapes would fill a book. As for me, I haven't had but one close call worth relating."

"That's the very one I'm after," said the Detroit Free Press interviewer.

"Well, it didn't amount to much as an adventure, I'm afraid, though I'm free to say I was never more frightened for ten minutes. Between what is called the Granite ridges and Bad Water creek, in central Wyoming, is a fine cattle range. I was out with a small party last summer prospecting for certain minerals and had to cross this valley at about the center. There were four of us on horseback, with our outfit packed on the three lead mules, and at about 2 o'clock in the afternoon we sighted something to make the hair lift our hats right off our heads."

"Indians or grizzly bears?" queried the scribe.

"Pish! The Indians were all right, and grizzly bears don't wander down into the valleys by daylight. What we sighted was a herd of about 4,000 cattle coming our way, and they were coming as if every critter was carrying a hundred pounds of steam. Two or three herds had got mixed, and in trying to separate them the boys had started a general stampede. In the old days the buffaloes used to be some on the mad rush, but let me tell you that the wild cattle of the west can run a third faster, and when they once get started they will charge a flaming mountain. The front of the herd wasn't over a mile away when we sighted it, and it was no use to run before it, turn back or ride ahead. Our horses were scrub stock and had no speed."

"And there was no convenient grove or rock to shelter you?"

"Not a tree nor a rock for five miles around, but just where we pulled up was a natural ditch about fifty feet long, cut out by the rains. It wasn't over two feet wide by twenty inches deep, but it was our only hope. We slipped off our horses, gave them a slap and piled into that ditch faces down."

"And the herd passed over you?"

"Exactly. I hadn't drawn three long breaths when the front of the herd was at hand. Let me just tell you that I was never so scared in all my born days. Every critter was bellowing, horns clashing, hoofs digging up the soil, and as each one jumped the ditch he caved the dirt in on me. I felt fifty different hoofs scuff my back, and every instant expected to be stepped on. It took the herd only about ten minutes to pass, but the time seemed hours to me. When the last one had come and gone I was regularly covered in and had to be dug out. Two of the party were stepped on and badly hurt."

"And your horses and mules?"

"Picked up on the horns of the cattle and tossed about and stepped on till they were reduced to a pulp. Just cleaned us out as slick as a whistle. If we'd been in our saddles nobody could have recognized us as having once been human beings.

"Seemed like the hand of Providence, didn't it?"

"Of course. That's what we look for and depend upon out in our country. Come out some time, and see how the old thing works when we are going to have an avalanche three miles long by a few thousand feet wide."

Novel Lamp Shades.

An English electrical firm is introducing some striking novelties in electric lamp shades. These shades are made of a specially selected description of natural feathers, dyed in choice tints, and arranged in artistic shapes and combinations of color. Among other beautiful designs of shades for floor and table lamps are the representations of various kinds of flowers made separately and grouped together on skeleton frames. The result is an entire departure from the hackneyed style of silk and lace shades now in vogue. The general construction of the shades is protected by a patent, and every design is registered. It is a noteworthy fact that the designer of nearly all the patterns is a young woman, who derives an excellent income from her work.

DESERTING THE STRIP.

Boomers Who Rushed in Are Now Sadly Trooping Out Again.

The results of the opening of the Cherokee Strip, September 16, 1893, are already history. There were ten men for every claim, and more than a third of the land was entirely worthless for any form of agricultural purposes. The year has been one of contests over claims, writes a correspondent of the New York Tribune. Many of these have been settled by force. Sufferings have been endured beyond the power of pen to describe. Claimholders dared not invest anything in their claims, not knowing who would be awarded the land by the government. Women and children who had been used to the shelter of a roof and the comforts of home were forced to spend the winter in temporary shacks, old tents, or in a wagon box set on the ground covered by an old canvas sheet. Every mouthful of supplies for man and beast had to come from the states. The long delays in opening the land had exhausted the money and supplies of nine-tenths of the boomers, so that when they entered the strip they had not as many dollars as children.

The chaos caused by so many contests prevented any general effort at breaking ground and planting crops. But those who could buy off the squatters and clear their claims of all contests have not raised anything. The spring rains gave promise of abundant harvest, but the drouth and hot winds which have prevailed all over the west have been doubly severe in this section, and the entire strip is almost as general in its desolation today as when the boomers had driven out the cattlemen. The claimholders, who borrowed a little money from their friends back in the states, have spent it and have no harvest. When harvest time arrived the yellow-tinted wheat was the evidence of the presence of death instead of the golden grain. The fields of sod corn have never shot the silken shoots which give the promise of the ears of corn. The fields have fired until the crops cannot be secured for forage, as the corn blades crumble and blow away like chaff. A more dreary scene of desolation cannot be imagined, and further westward the damage is more complete, if possible.

The first effects of this deplorable condition of affairs was upon the numerous cities. Thousands of the disappointed land hunters flocked to the town sites in the desperate hope of securing a town lot which would at least partly recompense them for their time and expense. These towns were largely promoted by a syndicate of sharks, who did all in their power to attract a great number of boomers, knowing that the large surplus of claim hunters would give their town a sudden importance and assist them in unloading their best lots at big prices. Nor were they wrong in their prognostications. Towns were built in a night which would rival in population and push many of the old county seats of the east which have more than a century's growth.

But with the failure of all vegetation these lot speculators, who had been holding on, hoping that good crops would help them out, have quietly abandoned the towns. The city of Perry, which ten months ago had a population of 15,000, has not today more than 300 souls. Other smaller towns have been almost deserted. Arkansas City has been filled for three weeks with the fleeing boomers, hurrying away from the land of promise to some locality which promises them at least an existence. Trains have been loaded with those who could secure the price of transportation, and many claimholders have secured assistance from the wife's folks, and have sent the women and children on the railroads, while they proceeded overland with the dilapidated prairie schooner and jaded, half-starved animals. Every day brings long lines of the discouraged, disheartened land hunters, who have spent a year or more in the vain effort to secure a few acres of land on which to build a home for themselves and families. To this army Oklahoma proper has not contributed any material strength. A few who were unfortunate in their selection of land, and who from other and various unforseen conditions have failed, have left their claims, but the majority who have remained in Oklahoma since the opening five years ago will be able to winter in comfort. They were more fortunate in their first few years and have now a very good start and are growing some corn on their old breaking, where a sod crop would not survive the drouth.

STUDENTS IN AN ICE CAVE.

A Natural Curiosity in the Shawangunk Mountains.

The traveling class in geology, under the direction of Prof. Heilprin, have made their latest observations in the northeastern part of Pennsylvania, and a member of the party writes to the Philadelphia Record from Conashaugh, Pike county, under the date of July 22, saying:

"Variety and novelty rewarded our efforts last week. On last Thursday we drove from our hotel at Cragsmoor to the little inn at the foot of the mountain, opposite Ellenville, from which we were to climb to the ice cave in the top. We made the ascent successfully, but took the wrong path, walked past the ice cave and wandered over the mountain tops all the afternoon, our search being fruitless. Late in the day we returned to the town to stay over night, that we might start bright and early the next morning.

"We attended to some very necessary purchasing and repairing of shoes, procured provisions for the trip next day, and on Friday morning we started, soon after 6 o'clock, to again ascend in search of the cave, this time taking a guide. We reached the cave about 9 o'clock, and, looking over the side of the chasm that leads to it, we felt the ice-cold air rushing out. Prudence dictated that we wait and cool off a little before going down into so cold a place. After a rest, and eating ice and snow, we climbed down into this big rift, and down the slide of ice and rock to the tongue-shaped mass of snow, which accumulates during the winter and remains throughout the year.

"The depth is about seventy feet, and we found the temperature in the coldest place 34 degrees, while out in the sunshine the thermometer ran up to 126. This ice cave is one of the many in the Shawangunk mountains, and they are very interesting as well as attractive features. The large fissures in the rock caused by the slipping of the upper course conglomerate on the fine underlying shale, extend to a great depth in many cases, and the snow forms a mass large enough to last through the entire season. The melting and refreezing of the snow cause quite beautiful stalactitic formations, resembling the calcite ones found in caves in limestone regions.

"As we had abstained from food to a certain extent the previous day, we had prepared for this trip quite an elaborate lunch, the crowning feature of which was to be the vanilla ice cream, made of condensed milk and frozen in the perpetual snow of the ice cave. The concoction was made carefully in a tin pail, a whole bottle of vanilla being used in it. The pail, with a lid, was buried snugly in the snow at the bottom of the cave. There it remained to freeze for two or three hours, according to most approved Greenland methods; but, alas! when lunch time came, and we excavated the luxury, it was found in its original liquid state, and that 'vanilla soup' became the substitute for ice cream.

"This was a grievous disappointment, for, as scientific students, we had expected unusual pleasure from ice cream frozen in nature's own freezer. The afternoon was spent in visiting other rifts in the vicinity. In one the ice formations hung like a graceful mantle, while in a deeper chasm a beam of sunlight, piercing the darkness from a chink in its rocky walls, made a beautiful effect. What is known as the 'great rift' is a tremendous split in the rocks, extending about a mile in length and in its greatest width about 100 feet. This riven and torn mountain, with its great blocks fallen in and downward, is a wonderful lesson in geology. There must have been some quaking in that region when those rocks were broken and tossed in so wild a manner."

OUTLOOK FOR THE OYSTER

Cultivation of the Luscious Bivalve at Home and Abroad.

UNITED STATES SUPPLIES THE WORLD

Measures Adopted to Supply the Growing Demand—Extinction Probable Unless Recklessness is Checked—Instructive Figures.

(Copyrighted, 1894, by S. S. McClure, Limited.)

The threatened extinction of the American oyster—an idle threat it would seem in the face of the fact that the production today is greater than it has been before in the history of the fisheries—has lead the United States fish commission to make many experiments in the line of artificial propagation, and to examine carefully the system of oyster culture followed abroad with a view to its adoption at some remote day in the United States. The French people believed fifty years ago that their supply of oysters was inexhaustible, but they have had to resort to the most remarkable artificial means to restore their fisheries. The abundance with which nature has blessed the Chesapeake waters may not endure through the next half century, especially if no attempt is made to protect the oyster beds by legislation.

It is likely that there will always be public oyster grounds in the United States as there are in England. Oyster culture in the older country is an important industry, but the attempt to interfere with the right of fishermen on the oyster banks has always met with a strenuous and partly successful opposition. Limitations have been placed on the public fisheries to the extent of prohibiting the marketing of deep-sea oysters between June 15 and August 4, and there are regulations which have been in force since the seventeenth century prohibiting the taking of small oysters altogether. But the British fisherman still dredges for oysters on the public banks and he probably will continue to exercise that privilege for all time. The same spirit of independence will preserve to the American fishermen the right to the public fisheries, though certain concessions are made even now to those who wish to enter on the industry of oyster cultivation. Already all of the Atlantic coast states have enacted laws setting aside sea bottom for preemption or lease by those who wish to enter on the cultivation of oysters; and most of the northern oysters come from private beds. It is estimated by Mr. Stevenson of the fish commission that the available sea bottom on the coast of the United States will always be able to over-supply the local demand for oysters.

In other countries the supply of available ground is so small comparatively that oyster farms are established under conditions which would be regarded by the American oysterman as almost prohibitory—certainly as commercially valueless. In Italy, for example, the available sea bottom is let in parks only fifteen feet square (the Maryland oystermen complain that the limitation of five acres on pre-emption hinders cultivation) and the Italian oyster farms are cultivated on the Swiss mountain plan—vertically. In France, muddy bottoms, which are generally considered impossible on the American coast, are adapted to the industry and are made to produce large crops. Now France is calmly considering the possibility of selling seed oysters to our oystermen.

There is no doubt that artificial cultivation like that of France could be adapted to American conditions. But the proposition to introduce the French system in this country has always met with a commercial obstacle. With the enormous natural supply to meet almost any demand, with the comparatively extravagant cost of labor in this country, would oyster cultivation pay? The answer has always been that the foreign system of culture would not pay in the United States; that only the limited industry which has been established along the New England coast could be made profitable as yet. When the oyster beds of the Chesapeake show signs of exhaustion, there may be a profit in bringing up oysters by hand; until that time it will never be a very important American industry. We produce today nearly six times as many oysters as all the rest of the world. We ship 100,000 barrels of oysters annually to England. We have oysters to spare, and at prices which no other country can even approximate.

A THREE-FOLD INDUSTRY.

There are three distinct branches of the oyster industry; the collection of the "spat" or spawn; the protection of the young oyster through natural growth, and the fattening of the oysters of marketable size. In some countries all three of these branches of the industry are carried on in the same place and by the same people. But there is a large trade in oyster seed (the developed spat), which is monopolized by France and Holland; and Belgium devotes her attention exclusively to the fattening of oysters which are grown in other countries.

It has been estimated that twenty-five oysters, under perfect conditions, could produce enough young to supply the whole Connecticut coast. A female oyster will produce 9,000,000 eggs at a time, and one authority says that a particularly large American oyster may produce 60,000,000 eggs at one time. The European oyster is less fecund, and produces only 1,000,000 to 2,000,000 eggs. But from the conditions surrounding the eggs, the spat and the young oyster, it is possible that from these millions of eggs but two full grown oysters will result. Mud is fatal to the young oyster, and may kill the oyster full grown. The crab, the star fish, the oyster bird, are all destructive influences which prevent the development of more than a minute percentage of the fertilized eggs. And the possibilities of fertilization are considerably lessened by the fact that the male and female oysters empty their generative products directly into the water, leaving largely to chance the fertilization of the female's eggs by the male fluid. An authority has estimated that each oyster born has 1-1145000 of a chance of reaching adult age.

THE MAIN DIFFICULTY IN THE INDUSTRY.

The influences affecting the permanency of the oyster supply in the United States are not so much the enormous consumption of full grown oysters as the destruction of the young and the failure to protect the spat or to provide for its safe deposit. With a few restrictions, it is every man for himself in the American fisheries, and it is no man's business to protect the young oyster, where it should be the business of every man. It is nobody's business to maintain the supply of spawning oysters, so the amount of spat decreases annually in certain well fished localities. The same condition of affairs occurred in France, and it became necessary there for the government to set aside spawning grounds. This necessity is not likely to arise in the United States for an indefinite period, but Mr. Stevenson, in one of his admirable reports, has suggested to the authorities of Maryland the necessity of preparing the oyster banks for the "set" of "spat," so that the greatest possible amount may be collected. A large proportion of the Chesapeake spat is undoubtedly lost in the mud of the sea bottom—one of the spat's worst enemies.

COLLECTION OF THE OYSTER.

Spawning having been protected, the next step in oyster culture is the selection of the spat. In America but few preparations are made for this. Along the Connecticut coast it has been the custom for some time to spread gravel at the rate of 100 or 200 tons to the acre on muddy ground, and on the same coast, as well as in Long Island sound along the New York shore, it is the custom for oyster farmers to scatter about 300 bushels of shells to the acre over the ground under cultivation. The use of shells to improve the oyster beds has had a limited popularity of late years in Virginia. But in the south, where so little private planting is done, there are not the same inducements to method that there are here in Connecticut; for example, where there are more than 70,000 acres of private ground, one-half under cultivation, and only about 13,000 of public ground.

On the Pequonock river in Connecticut there is still another method of collecting the spat, which might at first be considered an adaption from the Italian, but which was really a local discovery made in 1868. In that year a farmer near Groton, trimming the trees in his orchard, threw the branches into the river. In the fall he was much surprised to find the brush covered with oysters. Others began to experiment with brush, planting it in May and June, and with such success that this method of raising oysters is still followed to a limited extent in the neighborhood. Its limitation by the local authorities is in the interest of health, for the great accumulation of brush at one time made the water stagnant.

The great natural supply of spat in American waters in certain localities has made it unnecessary thus far to protect the spawning oyster. Preparing the sea bottom by dredging and scattering shells or gravel in these localities is enough to insure a satisfactory accumulation of spat. No attempt is made to protect the young oyster in America except by removing the crop to deeper water when it has attained a certain growth. This is in some measure a protection from the star fish, and in a great degree a safeguard against storms. When the oysters are 2 years old they are seed oysters, and much of the business of Connecticut oystermen is in the raising of seed to sell to Long Island planters. In four years the oyster is full grown and ready for market.

THE OYSTER IN ENGLAND.

England is next in importance to the United States in the production of oysters; but this is due largely to the conditions which seem to render her natural supply inexhaustible. The Roman writers spoke of the abundance of oysters on the English coast in their time, and while the supply has been lessened by too indiscriminate fishing, there is still a large business in oysters taken from the public reefs. The decrease in natural production, however, is well illustrated by the fact that seed oysters which were worth about $1.50 a tub of twenty gallons in 1859 and $2 a tub in 1885 are today quoted at $10 a bushel. In view of this heavy price for native seed, the chief aim of the English culturists has always been the development of the oyster embryo in reservoirs. The possible profits of the successful execution of this undertaking are almost beyond computation. But up to the present time the English experiments, though carried on at great expense and with every scientific care, have been unsuccessful. The only successful experiment in raising a crop in a closed pond from spawning oysters is that of Mme. Veuve de Saint-Sauveur at Breneguy, in France, and the conditions there are peculiar. The chief obstacles to success in England have been the collection of sediment in the ponds, the excess of salt in the water and the malaeration of the water. The fish commission at Washington has gone a step beyond the Englishmen in its experiments with artificial cultivation. It has proved that it is possible to remove the eggs from the female oysters, fertilize them and raise the spawn. But while this process is interesting from a scientific view point it is as yet of no value commercially.

The chief business of the oyster farmers of England is very like that of the oyster farmers of Connecticut. Seed oysters are purchased in the spring, chiefly in France. A small amount of seed comes from America. The French oyster after two or three years growth in English waters takes on the characteristics of the native oyster and can be detected as a transplanted oyster only by an expert. The planting is done on private grounds, leased from the government. Some of the leases run sixty years. The Whitstable company, a co-operative concern which produces $1,000,000 worth of oysters in a single year, has been in existence for a century. The private grounds are prepared by dredging and by scattering shells; and the seed is strewn thickly in about a fathom of water. The product is gathered with dredges. Both in England and in America dredges are used on the public, as well as on private grounds. In Connecticut there is a law prohibiting the use of steam dredges on the public banks.

OYSTER CULTURE ON THE CONTINENT.

The continental methods of oyster culture differ usually from the methods adopted in England and America. Italy has the oldest oyster farms. The business is carried on extensively only at Tarente. The system is entirely different from the French system—in fact it has no parallel in the world. The Italians have divided the water into parks fifteen feet square which are rented by the small holders at 50 cents apiece. The government rents out the entire bay bottom to a company for $10,000 a year. The limits of each park are marked by ropes stretched between corner posts. Other ropes are arranged weblike across the space. The posts are made of three sticks of green pine bound together near the top. Loose bundles of hazel or gorse boughs are hung in the water. They attract the spat. Spawning takes place all through the the year, but the chief set is in June. When the oysters are firmly attached these bundles of boughs (called fascines) are removed from the water and broken up into twigs. The twigs are spliced into long ropes which are then hung in the water. The oysters swinging from these ropes escape the sediment which too often spoils an oyster crop at the bottom of the water and the crop matures very rapidly. It takes two years and a half to produce an oyster of the first grade. A rope fourteen feet long will hold 2,000 oysters. The rope method economizes space and it enables the oyster farmers to overhaul their crop and to clear away any parasites which might injure the oysters. In addition to these ropes there are light baskets hung in the park in which loose oysters, taken from the bottom, are kept. The annual yield at Tarente is about 20,000,000. There are smaller oyster farms at Fusaro and the Lucrine lake. Naples has some few parks like those at Tarente, but the water is not of the purest.

THE PRIZED GREEN OYSTER.

The best French oysters are those which have been fattened and "greened." The green oysters come from Marennes, where they are kept in claires or basins in which a green moss, peculiar to the locality, grows. This green color is highly prized by connoisseurs. After "greening" or fattening the oyster is often placed in a basin filled with clear water, where he is allowed to remain until his system is freed from the sand or mud which may have entered the regular food. These are the choicest oysters shipped. Some oysters are "educated" for long distance journeys. They are taken from the water every day for a certain time until they become accustomed to keeping their shells closed and retaining their juices. When they have been educated in this they are packed and shipped to market. Many of the oyster farmers ship direct to consumers. An order given in Paris Friday night will be filled in time for Sunday dinner. The green oysters of the best grades cost the consumer from 1 to 4 cents each and the Portuguese oysters about half as much.

There is a little dredging on the public grounds on the French side of the channel; but it is coontrolled by the government and is only allowed for very brief periods.

The Dutch abolished public dredging in 1870 and the government took possession of the oyster beds. Now they are let to the highest bidder on short leases and they bring to the public treasury about $500,000 a year. In some favored localities it is enough to shell the ground and wait for the spat to accumulate; in others the French tile is used. During the process the tile is handled twenty-one times. Yet the cost of each oyster delivered on board the railroad cars is only 3 cents. The Dutch oysters have a large sale in Germany. The seed is sold in many places. Holland produces about 70,000 bushels of oysters each year—a little more than Italy.

The public oyster beds of Spain have been dredged out, and the price of oysters has advanced in twenty years from 2 cents to $2 a hundred. The seed for the Spanish farmers is imported from France, and the French method of case culture is followed. The Portuguese industry is very like that in America. The spat accumulates on the shell bottom naurally and it is collected as seed and sold to fishermen. An English company for a long time controlled the export business and made a great deal of money sending Portuguese oysters to the Thames, where they were fattened for the English market. The business is now in the hands of Portuguese companies and is not very flourishing.

Germany has but one district for oyster culture—a sheltered corner of the North sea. The banks were rented out at one time for $17,000 a year. Between 1881 and 1891 they were closed by the German government because they were being depopulated. They are now held under a lease which does not permit more than a certain number of oysters to be taken and which pays the government a percentage of the catch.

The Belgian oyster industry is devoted entirely to fattening. The oysters are received from England, France and Holland at Ostend, and are placed in cases in concreted compartments. In a month they are supposed to have acquired the peculiar flavor which the Belgian water gives them, and they are put on the market.

Holding through natural advantages the position on which we now occupy in the oyster world, it is not at all likely that we will be obliged to adopt foreign methods of cultivating oysters within the experience of this or the next generation. But if it should be necessary it has been demonstrated that these methods can be applied very easily along our coasts and that we can profit thus by the experiments of the oyster farmers of other countries.

WILD HOGS OF ARIZONA.

Descendants of Tame Swine, but Now Dangerous to Hunters.

The wildest of wild hogs live both above and below Yuma, on the Colorado river. While the steamer was lying at Castle Dome landing a few days since, says the San Francisco Chronicle, a fine band of them on the opposite shore came down to the river to feed on the banks, where the grass and weeds were green, and to get a drink of water. They paid no attention to the boat, nor to the Indians at work. After loafing around for awhile an old boar came out of the brush, and, on spying us, gave a "swish," and away they all went. Hardly a day passes that the Indians and cattlemen do not run upon them. These bands seem to be more timid than ugly.

When the late Thomas Blythe was trying to settle a colony at Lerdo, forty-five miles below Yuma, on the Colorado, he sent down a large number of fine, full-blooded Berkshire and Poland-China pigs, and turned them loose on the banks of the river near Lerdo, where they lived on the roots, grass, weeds, tules and mesquite beans; bred, multiplied, kept fat and filled the low tule lands with a large number of fine porkers. Never seeing a human being, except now and then a lone Indian, they soon became wild, and wilder still, and scattered until the low lands and woods were full of them.

Notwithstanding that the coyotes slaughtered the little ones in great numbers, they have increased until it is estimated that at the present time there are more than 10,000 of them roaming up and down the Colorado and Hardie rivers, from their mouths up as high as the tide runs, or from sixty-five to seventy miles this side of the Gulf.

They go wherever they please; nothing stops them in their course. When the Colorado is at its flood they will cross it from shore to shore, even near the Hardie, where it is four miles wide when at its highest gauge. Their range gives them the finest of feed—wild sweet potatoes, tules, stray fish, clams, dead turtles and seaweed along the river bank at low tide. They are unmolested, except now and then by a hunter who finds his way down the river. Most of the hunters give the wild swine a wide berth except now and then as they happen to spy a nice little roaster on the bank and within easy rifle shot.

A few years ago a man and his family were living a few miles below the colony, on the banks of the Colorado. He had a pair of very fine large stag hounds, which the owner claimed could run down and kill any wild hog in that region. One day he took dogs and rifle and went for a nice little one, just right for the oven. He had not gone far before he found a large band of hogs, and turned his dogs loose on them. No sooner had they started when out of the tules near by jumped an enormous boar, a monster, who, with mouth wide open, paying no attention to the dogs, made for the hunter. The latter drew up his rifle and fired, but on came the boar, the dogs nipping at him at every jump.

The hunter fired a second shot, but on came the beast. The hunter turned and ran for a mesquite tree a few yards distant, the hog close at his heels. He dropped his gun and jumped for his life, grasping a limb of the tree just as the hog grabbed his pants and tore one-half of them from him, but he was safe, just out of reach. The dogs all this while ran grabbing the hog by the hind legs, to which the beast paid no attention.

The mad boar seized the bark of the tree in his great tusks and tore it into shreds. Finally he turned upon the dogs, instantly killed one and wounded the other so that it died soon after. He then turned his attention to the tree where the hunter sat. He guarded him until it was dark. Twice did the man get down and try to get his rifle, but his foe was on the guard and drove him back up the tree. During the night the boar left. Daylight came and so did help. The men had hardly reached the river and got in their boat when down came the old hog after them in vain pursuit.

Eli Perkins on Japanese English.

The Japanese want to learn English. The dream of every Japanese servant in Japan, where servants work for 5 cents a day and their rice, is to come to America.

One day in Tokio my wife advertised in a Japanese newspaper for four servants. Thousands answered the advertisement. When my wife asked them what wages they wanted they said, bowing to the ground:

"We come if you speak English."

"But your wages?"

"O, you give us rice and speak English—that's all."

When they came they were so anxious to learn English that the Jinrikisha (carriage drawer) and Amale (maid) repeated after us every English word they heard. When we came away from Yokohoma the last day, I remember how proud our jinrikisha man was when he made us a present of a bundle of fans and said with his face all beaming with smiles: "Please accept from Fuji San No. 1," nor how triumphantly he looked down upon the other "riksha" who did not understand him. Fuji San was prouder of that speech than Cicero was of his speech against Cataline.

The Japanese have a mania for putting up English signs, and they flood your room at the hotels with English cards. And such English! The Japanese have no imperative mood and they generally express an idea negatively that we express positively. One day I said to the waiter:

"Kishi, the rolls are cold."

"Yes," he said, "a good deal of not cooling the cakes is good."

A conspicuous notice at a Kioto hotel reads:

On the dining time nobody shall be enter to the dining and drawing room without the guests allow.

One of the articles in the municipal laws of Kioto reads:

Any dealer shall be honestly by his trade. Of course the sold one shall prepare to make up the safe package.

A Tokio dentist's circular reads:

Our tooth is a very important organ for human life and countenance as you know; therefore when it is attack by disease or injury artificial tooth is also very useful. I am engaged in the Dentistry and I will make for your purpose.

The printed label on the claret bottle at Nikko read:

Weak man who is not so hard of his stomach takes notice of his health ever must use this wine usually.

To show how an educated Chinaman, who thinks himself far above pigeon English, handles our language, I add a note which I received from Eu Don, a Chinese banker, whom I invited to dine with Consul General Leonard at the Astor house, Shanghai:

SHANGHAI, 1st August.—Mr. Landon: Dear Sir—I am regret to inform you that as you so kind call me to Take dine To day, which was my Engagment Have none time to meeting you Such pretty dinner, and much oblige. Yours faithfully,

EU DON.

American Public Libraries.

In Librarian Fletcher's little book about public libraries in America, says the Boston Globe, Massachusetts is credited with 213 free public libraries, with a total of 2,760,000 volumes, or 1,223 volumes for each 1,000 of the population, while the nearest rival is New Hampshire, with forty-two libraries containing 175,