

THE DESERET NEWS: WEEKLY.

THE "GRASSHOPPER" PLAGUE.

THE grasshopper, or locust, is so insignificant looking that if personal observation and chronicled facts did not tell how destructive it is, there would be difficulty in believing how serious a matter is its presence in any locality. Endowed with an almost incredible voracity; breeding with astonishing rapidity; and keeping together in innumerable myriads, they form one of the most terrible plagues of Asia Minor, Arabia, Egypt and adjacent countries. An authority on the subject says of the locust: "In Arabia and other countries that are infested by them, they come in vast numbers on their corn when ripe, and what they do not eat they infect with their touch and the moisture coming from them; and afterwards dying in great numbers they poison the air and cause a pestilence."

The insects which visited our Territory in such vast numbers last Summer and Fall, depositing their eggs as they passed along, which have hatched out this Spring, are undoubtedly of the locust species; and observations made relative to their peculiarities and habits here and elsewhere, reveal some very interesting particulars concerning them. Their movements indicate the guidance and direction of some intelligence. True to their instincts they will only move in masses; but they are not like bees which fly in swarms following the queen bee, for the movement among the locusts is apparently simultaneous over a surface of many square miles. They will rise, too, hover around on the wing for hours, and alight if the wind is not blowing in the direction in which they are traveling. And for days and weeks they will travel forwards in almost a straight line, halting at nights, during dull days, and while unfavorable winds continue; but never swerving from the course on which they started, when their flight is renewed.

For some years past it has seemed as if they were steadily working their way East; for though they are exceedingly numerous just now in this Territory, in Montana and Idaho, they are still more numerous, if we are to credit the published reports, in various portions of Nebraska, Kansas, Iowa and Western Illinois, and away southward in Texas. On their flight in this region last Summer they traveled south-east and north-east, according to the best information we have been able to obtain.

This is confirmatory of the views expressed by a writer in the Council Bluffs Democrat, who says that "by some inscrutable Providence, the plague while having its birth in the extreme West, and although at periods alarmingly threatening, has not come upon the people like a thief in the night, but rather as a warning of Providence." Further on he says: "They seem to be the instruments of a dire divine visitation of wrath, yet held in store, and to be meted out in time upon some people and in some section eastward." He intimates that those now moving eastward are of two hatchings; and that both small and large are doing their best to make good progress; and thinks the second crop will reach the eastern States this season in time to deposit their eggs this Fall. However that may be, the great extent of country over which they are now spread, and their fecundity are ominous of heavy loss and consequent suffering through their ravages in coming seasons, unless they should be destroyed in some way, which does not seem likely judging from the tenacity with which they cling to life.

Of the habits and characteristics of the grasshopper or locust, the writer in the Democrat says:

"There are some things very remarkable about the hopper not generally known abroad, which we shall attempt to give as we have learned the facts. The grasshopper has heretofore only left its birth or hatch-place at maturity when its wings are fully developed, flying in such dense clouds miles above the earth at times as to obscure the sun and to induce twilight! While on the wing, the period of incubation occurs, and they are on the wing only during daylight, stopping like human travelers, to feed and rest at night. It is at these rests that vegetation suffers, and when, at the right season, they deposit their eggs in piles under the ground, hundreds and thousands in each grave. This, however, does not occur till about middle life, by grasshopper calendar, or about the second or third month after they

take wing, and again in the fall, or grasshopper old age. Before taking wing the second time, and just after depositing their first larvae, the grasshoppers practice a rigid fast in order to reduce their bodies to such lightness as to be able to bear themselves onward on their puny wings.

We have heard it positively asserted that on the lines of railway, the grasshoppers will cling to the warm rails in such masses as to check the progress of the driving wheels of locomotives by greasing the iron and clogging the wheels! However remarkable this may appear, it is fully established by unimpeachable authority as true."

When it is considered that they sometimes fly in clouds so dense as to obscure the sun and produce an appearance of twilight, the last statement made does not appear so incredible. In all times and in all countries visited by them, they have been looked upon as a plague. Famine and pestilence have often followed them. They devour and poison, and everything green of which they eat is blighted. And where they invade a land in sufficient numbers, their presence may well be viewed as a national calamity.

EARLY ACTION IN FAVOR OF RAILROAD.

As the construction of the Pacific Railroad is just now occupying a considerable share of public attention, and is still likely to do so for some time to come, the present seems to be an appropriate season to explain our position respecting this great enterprise. The opinion has been widely entertained, and freely published by many newspaper writers, that the people of Utah were opposed to the construction of the Pacific Railroad. This statement has been made without there being any more foundation on which to base it, than the imagination of these writers. They have supposed that the Railroad, when completed, would bring outside influences in contact with us, which, they thought, we could not endure and would break us up. Giving the leading citizens of our Territory the credit for perceiving that these would be the results of the building of the railroad, they have come to the conclusion that this grand undertaking would meet with opposition here. They have not had any grounds for these suppositions, opinions and conclusions, and those who have written in this strain have, in so doing, betrayed inexcusable ignorance of the real feelings of the people of this Territory, of which they professed to know so much.

The time is fast passing away when the people of Utah will be under the necessity of defending their motives and characters even to the extent they do at present. Circumstances are so shaping themselves that they will be relieved from this labor. They will be known and understood without having recourse to this. Already we see a great change in this respect. Popular delusions respecting the "Mormons" are fast passing away. It is becoming tolerably well known that they do not wear horns, that they do not have cloven feet, that they are not ogres, and that they do not live by preying upon mankind. It does not require the testimony now that it once did to convince the intelligent public that they are truthful, honest, and industrious, and that a man who is not a "Mormon" can live among them without being in constant fear of his life.

There is some disappointment just now being felt by some parties because the construction of the railroad is favored by the people of Utah. The acceptance of a contract by President Young for the grading of the road from the head of Echo Cañon to this valley, and the heartiness with which the people manifest a desire to take hold of the job, take away the thunder of these writers, whose capital stock is the wrong-doings and sinfulness of the "Mormons." An opposition on the part of our citizens to the railroad, or even reluctance to aid in its construction, would have furnished needy scribblers matter for interminable diatribes respecting our disloyalty and barbaric tendencies. Such action or disposition on our part would have been a lucky windfall for them. But we would have to deny all our past wishes and action were we to do so.

From the earliest days of our settlement in these valleys, the construction of a railroad across the continent has been desired and looked forward to with pleasure by the leading minds of the community. As early as the winter of 1851-2 we find the Legislative Assembly memorializing Congress "For the construction of a great National Central Railroad to the Pacific Coast." This road to be built from some eligible point on the Mississippi or Missouri rivers to

some point on or near the Pacific coast. The Memorialists stated that they knew that no obstruction existed between this point and the coast, and that "iron, coal, timber, stone and other materials exist in various places on the route, and that the settlements of this Territory are so situated, as to amply supply the builders of said road with materials and provisions for a considerable portion of the route, and to carry on an extensive trade after the road is completed." This memorial was signed by Governor Brigham Young, March 3, 1852, and concludes as follows:

"Your memorialists are of opinion that the mineral resources of California, and these mountains, can never be fully developed to the benefit of the people of the United States, without the construction of such a road; and upon its completion, the entire trade of China and the East Indies will pass through the heart of the Union; thereby giving our citizens almost entire control of the Asiatic and Pacific trade; pouring into the lap of the American States, the millions that are now diverted through other commercial channels; and last, though not least, the road herein proposed, would be a perpetual chain, or iron band which would effectually hold together our glorious Union with an imperishable identity of mutual interest; thereby consolidating our relations with foreign powers in times of peace and our defense from foreign invasion by the speedy transmission of troops and supplies, in times of war.

"The earnest attention of Congress to this important subject is solicited by your memorialists, who, in duty bound, will ever pray."

Two years afterwards, the Governor and Legislative Assembly of the Territory of Utah, sent another Memorial to Congress on the same subject. In that Memorial they expressed their desire to see the project successfully carried out—"that it is with no ordinary feelings of interest that we witness the progress of events, which appear probable to result in the construction of a railway across the continent." The Memorial also sketched a route which the signers thought most feasible, and it is remarkably significant that the route now adopted is almost entirely that which was then designated.

HOME ITEMS.

FROM TUESDAY'S DAILY.

CORRESPONDENTS writing for publication are requested to write on one side of the paper only.

No notice can be taken of anonymous communications. Correspondents' names must in every instance accompany their communications, not necessarily for publication, but as a guarantee of reliability.

COMMENCED GOING.—Bishop Proctor, with thirty men and four teams started out from the 10th Ward for Echo Cañon this morning, to work on President Young's contract on the Railroad. They are pretty well provided with tools for their work, and have a month's provisions with them.

RETURNING.—By letter from San Francisco, dated the 2nd, we learn that Elders Alma L. Smith, Ephraim Green and C. Boyden, with their families, arrived in that city on the 1st inst., from the Sandwich Islands, on their way to their homes in this Territory. They were "all in comfortable health."

FULL FLEDGED.—This morning full-fledged, though not full-grown, grasshoppers were flying around, seemingly enjoying their aerial powers and the warm sunshine. These are probably of the first that were hatched out, and we may look for them moving soon in some direction, whether into neighboring grain fields or to more distant parts, it is impossible to say. Vast numbers, by their size, look as if they would have their wings out in the course of a week.

TROUT SPAWN AND TROUT CULTURE.—Through the kindness of Hon. W. H. Hooper, our esteemed Delegate, who has received numerous letters from this Territory desiring information concerning fish culture, we have received a circular published by Mr. Seth Green, of Mumford, Monroe County, New York, the celebrated experimentalist in fish-culture. Mr. Green has been trying for, and will likely receive, an appropriation from Congress, to enable him to fully test his theory on this subject. We publish the circular for the benefit of the people at large throughout the Territory:

"GENERAL DIRECTIONS.

Build your ponds according to the amount of water you have. If you have but little, build small. The water should be changed every 24 or 48 hours, and the oftener it changes the better. The trout can be very plenty if they have sufficient fresh water and food.

I sell impregnated spawn from the first of November to the first of March, for ten dollars per thousand for lots less than 5000; For 5000 or over, eight dollars per thousand, shipped in moss. I can send them a fifty days' journey packed in a box with moss. I place the moss box in a tin pail, filled with saw dust, so that the spawn will not feel the change of heat and cold.

DIRECTIONS FOR HANDLING THE SPAWN.—Pick the moss carefully off from the top of the spawn. Then put the box in a pan of water and turn it nearly bottom side up,

and pick the moss out very carefully. The spawn will sink to the bottom, and you can pick the moss out of the pan. If there is a little left in it will do no harm. Then pour the spawn in your hatching trough by holding the edge of your pan under water, and "place" them without touching the spawn, by agitating the water with the bearded end of a feather. The dead spawn will turn a milk white color, and should be picked out. Your trough should be so arranged that the water will run in it about twelve feet per minute. The water should be filtered by running through gravel or cloth screens, to prevent the sediment from reaching the spawn. I run about one inch of water over my spawn, and if any sediment gets on them and is allowed to remain there long, it will surely kill them. Remove all sediment with the bearded end of a quill by agitating the water, without touching the spawn.

Large ponds with but little water, get too warm in summer and too cold in winter, for Trout to do well. It is detrimental to have any other fish with Trout. Any kind of fish or fish spawn is good for feed. The young should be fed twice per day very slowly—if fed fast the food sinks and befools the trough, and the Trout will sicken and die. If fed regularly and the trough kept clean with a good change of water, and not kept too thick, they will live and do well. If neglected they will surely die.

It is for the benefit of customers to send orders early in the season, as they cannot be shipped in warm weather with safety.

WHAT IS DEATH TO SPAWN.—The sun, sediment, rats, mice, snails, crawfish and many water insects.

My troughs are 25 feet long and 15 inches wide. The water that feeds each trough would go through a half inch hole with a three inch head. Use fine gravel that has no iron rust in it. My troughs are three inches higher at the head. The average temperature of the water is 45°, and the fish hatch in 70 days. Every degree colder or warmer will make about six days' difference in hatching. Trout hatch the soonest in warm water. The sack on their bellies sustains them for 40 or 45 days after hatching; then they need food. I use beef liver, chopped with a razor or sharp knife, nearly to the consistency of blood. If you have small streams or shallow water near the head of your pond, put a few in a place in the stream and pond, and they will take care of themselves better than you can. The object of distributing them is that they will get more food. All old streams and ponds have plenty of food for small Trout and large, which you will find by examining the moss, sticks and stones in your ponds and streams, as they are full of water insects.

I sell young Trout, one inch long, for \$40 per thousand delivered at your nearest express station, or \$30 at my ponds. They can be carried in cans or barrels any distance when small, and during the months of January, February and March. They cannot be carried with safety in warm weather without a great deal more trouble. It takes as much water to support a one year old Trout as it does a thousand small ones, of sufficient size for stocking ponds and for shipping.

I do all my selling Trout and spawn for stocking during the months of November, December, January, February, March, April and May. My Trout begin to spawn the first of November and cease the first to March.

All orders filled promptly.

SETH GREEN.

P. O., Mumford, Monroe Co., N. Y.

Telegraphic address, Caledonia, Livingston Co., N. Y. Ponds, three-fourths of a mile from Caledonia."

FROM WEDNESDAY'S DAILY.

THE "HOPPERS."—We have been informed today by different parties from Mt. Creek and South Cottonwood, that particular smash is being played with the "shoals and nations" of grasshoppers in that quarter, by a small worm that has made its appearance among them. It has the appearance of a maggot, and is killing the destructive little pests in large numbers. Should this antidote spread over the country, the grasshoppers may be prevented from damaging the crops much more than they have already done.

It is encouraging to constantly hear from various parts of the Territory, that notwithstanding the ravages of the "hoppers," in many places the prospects are good for fair crops and in some places for good ones.

RECOVERING.—Bro. Peter Nebeker called at our office to-day. He is still very weak from the effects of the blow he received sometime since. We are glad to see him so far recovered as to be able to get about a little.

FILLMORE.—We learn by letter from J. H. Pugmire, dated the 8th inst., that a Female Relief Society had been lately organized at Fillmore. Mrs. E. Holbrook was appointed Presidentess, and Mary A. McBride and Matilda King as Counselors, and Mrs. M. Robinson, Treasurer, and Mrs. E. Lyman, Secretary.

Bro. P. says, that notwithstanding the grasshoppers have done some damage, good crops are expected in that part of the Territory.

Special Notices.

WANTED:—One hundred and fifty cords of red pine wood at the Paper Mill. tf

AGENTS of the DESERET NEWS will please endeavor to collect what Rats they can, and forward at their earliest convenience. tf

FOR SALE.—Two good second hand wagons for sale, cheap. Apply to Angus M. Cannon, DESERET NEWS OFFICE. tf