

moisture and greater yields result. Some, however, are slow to be convinced of this, and still follow the old system of high ridges, much to their loss.

Some follow the practice of putting their mangels upon a dirty piece of ground in order that by doing so they will clean the ground. This practice may have been all right in the days when labor was plentiful. Ridges at that time were necessary, because with a dirty piece of ground it is next to impossible to thin the mangels should they be sown upon the level. In our own practice we select a clean piece of ground for our mangels. We prefer to use a clover sod that has been manured in the fall or spring.

This is plowed as soon as possible after the rush of the spring seeding. It is worked up to a fine seed bed, and the seed sown about the 24th of May. We have found from experience that it does not pay to sow earlier. After sowing, the ground is rolled, and then it receives a stroke of the harrow. In a week's time it is harrowed again. Should the soil become encrusted, from the effects of rain, it is harrowed a third time, provided the mangels are not showing above the ground. In this way countless weeds are destroyed before the mangels put in an appearance.

As soon as the mangels have reached the four-leaf stage, they should be cultivated. If the common scuffler is used, it will be necessary to have a boy to ride or lead the horse, as the operator will be kept busy guiding the cultivator. With a proper arrangement of the cultivator knives, the soil will be cultivated close to the mangels. There is then little left to hoe by hand. The thinning should follow immediately after the cultivator. It can then be done with despatch, and, as the plants and weeds have obtained but little size, they can readily be disposed of in the space between the rows. The mistake of thinning before cultivating, is sometimes made. The cultivating should always be done before, as it is well nigh impossible to cultivate on the level soon after the thinning has been done. Besides, much more labor is expended when thinned before cultivated. Where this practice is followed, level cultivation is sure to have supporters. In order to have the plants at a desirable stage for thinning, it is necessary to sow at different dates in succession. The plants will then be at the desirable stage to thin throughout the whole of the operation, provided, of course, that you have made your calculations correctly.

Once cultivated and thinned the mangels are in shape for a few weeks, at least. As soon as they have attained considerable size, send the cultivator through again. The mangels being in somewhat of a hollow, will be nicely mulched with this cultivation. Many weeds will be covered up between the rows by this same operation. The cultivating should be done as often as is required throughout the season, depending upon the growth of the weeds, and the condition of the soil in the mangel field.

Should it be a dry season, the mangels may be somewhat difficult to handle in the fall, when sown upon the level. This may readily be overcome by running a furrow, with the plow, alongside of the mangel rows. The mangels can then be pulled into the furrow with ease. Taking it on the whole, level cultivation is by long odds the best way of growing mangels. It is a labor-saving method, as they can be sown quicker, no ridges being necessary, and, when placed upon a sod, as advised above, few weeds will interfere with any of the operations. In addition to this, increased returns are secured, where this practice of level cultivation is followed.

RURAL FREE DELIVERY NOT SELF-SUSTAINING

The Thirtieth of a Series of Articles Written by an Editorial Representative of this Paper, who Recently Visited the United States, with the Object of Studying the Free Rural Mail Delivery System.

OCCASIONALLY the charge is made that the reports of the United States Post Office Department, relating to free rural delivery, are not to be relied upon; that they have been "doctored" so as to hide the heavy losses caused by the service. Any person who examines these reports, and investigates the service, can find but little justification on such contentions. While the Department is firmly convinced that the expense of the service is fully justified by its results, its reports do not hide the fact that the value of the mail collected and delivered on the routes falls far short of meeting the cost of the service.

In the early days of rural delivery, some attempts may have been made to prove that the service was self-sustaining. Figures were quoted for some routes that were being operated at a profit. These routes, however, were rare exceptions.

ending June 30, 1904. None of the reports printed during the past few years give similar information, so later figures are not available.

During that year, statistics were prepared, covering 24,566 routes that were in operation in 50 states. The average number of registered letters or packages delivered monthly on these routes was only 1.8. Such a small figure seems almost incredible, but is authentic. The average number of letters and post cards delivered on each route during a month was \$74, or about only 35 a day. The average number of newspapers, circulars and packages, delivered monthly on each route, was 2,830, or an average of about 113 a day. This indicates that the patrons of the routes must have taken advantage, to the full of their opportunity, to take daily papers.

Another set of figures, published in the same report, shows the number of pieces of mail col-



A TYPE OF FENCE THAT IS FAST DISAPPEARING

The stump fence should be a thing of the past. In some localities, however, it is still in evidence. The fence not only is unsightly, but it forms a veritable paradise for all sorts of weeds, as is shown in the foreground of the illustration.

In the report of the first-assistant postmaster-general, for the year ending June 30, 1900, when the service was still in the experimental stage, mention is made of several routes that were being operated at either a profit, or at but a slight loss. At that time the carriers were paid only \$500 a year. In one case, in St. Lawrence county, New York State, two post offices and a star route, or, in other words, a mail route, had been discontinued, at a saving in expense of \$462.87 a year. The cost of the rural route that replaced them was \$500. The net yearly loss on this route, therefore, was only \$37.13.

In a county in Illinois, three post offices, and one star route were discontinued, resulting in a yearly saving of \$326.48. They were replaced by one free rural delivery route, costing \$500, effecting a net saving of \$26 a year. Such routes, however, as already stated, were the exception, and not the rule.

MAIL HANDLED WAS SMALL.

That the amount of mail handled on the average rural delivery route, is very small, is indicated by the tables published in the report of the fourth assistant postmaster-general, for the year

ended on the different routes, the value of the stamps cancelled, and the pay of the carriers, for the full year. The number of registered letters collected was 437,520. This is an average of less than 18 letters for each route for a full year.

The average number of letters and post cards collected monthly on each route, was 513, or only a little over 24 daily for each route. The average number of newspapers, circulars, and packages mailed by the patrons of each route, was only 29, or but a fraction over one a day.

A HEAVY LOSS

The average value of the stamps cancelled by the carriers each month, on the mail collected by them, was \$10.64, or only a fraction over 43 cents a day. The average monthly pay of the carriers was \$49.54. The average monthly loss on each route (not counting the savings effected by the discontinuance of the post offices, and mail routes that were replaced by rural routes) was, therefore, almost \$30 each.

The total value of the stamps cancelled during the year on the mail collected by the carriers, was \$2,601,815, and the pay of the carriers \$12,122,725. The loss, therefore, according to