

MRS. HARRISON AND DAUGHTER GO ABROAD



... Benjamin Harrison, widow of the former president, and her daughter, Elizabeth, who have sailed from New York for a trip to Europe. Miss Elizabeth has been attending a school in Connecticut.

RAIL TRAFFIC ON TEHUANTEPEC AND PANAMA TRANS-ISTHMIAN LINES, 1913

Roads Carry \$130,500,000 Worth of Merchandise, Brought to Their Termini by Ships From U. S. to Be Reloaded at Opposite Termini and Shipped to Other Ports, U. S. and Foreign.

Washington, D. C.—Two small isthmian railways—the Panama railway, 40 miles in length, and the Tehuantepec railway, 190 miles long—carried, in 1913, \$130,500,000 worth of merchandise, brought to their termini by vessels from the United States to be reloaded at the opposite termini and shipped to other ports of the United States and to foreign countries. This is double the amount thus transported in 1908, one year after the opening of the Tehuantepec line, says department of commerce report.

New Orleans' shipments via this route were all consigned to foreign countries, chiefly those on the South American west coast, the largest being \$800,000 worth to Ecuador, \$768,000 worth to Peru, \$427,000 worth to Chile and \$84,000 worth to Nicaragua. San Francisco utilized the isthmian railways in shipping \$14,600,000 worth of merchandise to New York, \$1,720,000 to Massachusetts, \$436,000 to Philadelphia, and \$4,830,000 worth to foreign countries, chiefly Germany, France, the Netherlands, England and Belgium.



William B. Wilson, Secretary Department of Commerce.

merchandise, moved westward, \$23,700,000 worth via Panama and \$62,400,000 via Tehuantepec, while the remainder moved eastward, \$7,300,000 across the Panama line and \$37,100,000 worth over the more northerly trans-isthmian line. Only a few American ports participate in this trans-isthmian traffic. Of the westward movement, \$84,000,000 worth of merchandise was shipped from Boston. The east-bound traffic included \$21,800,000 worth from San Francisco, \$18,200,000 from Hawaii, \$2,100,000 worth from ports in the state of Washington, \$1,800,000 from ports in southern California, and about \$400,000 worth from the state of Oregon.

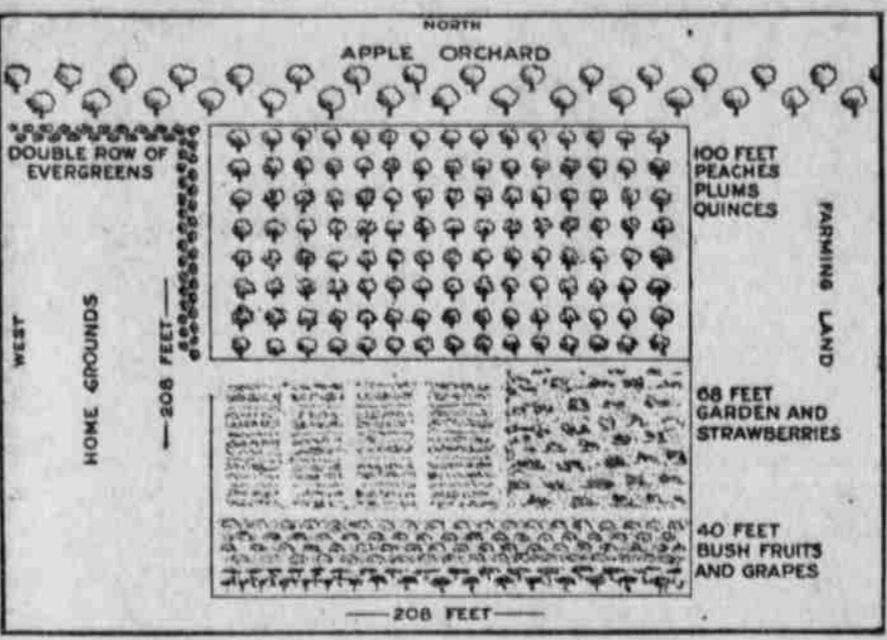
Hawaii's isthmian traffic all passed over the Tehuantepec line and included \$17,965,000 worth consigned for orders to Delaware Breakwater and \$187,000 worth to foreign countries. Manufactures supplied most of the west-bound; sugar, fruits, wines, wool and canned salmon most of the east-bound traffic in domestic products passing over the isthmian railways between the Pacific and Atlantic coast ports of the United States. Thus the westward movement in the calendar year 1913 included 64 million yards of cotton cloth; 17 million dollars' worth of iron and steel manufactures, consisting largely of machinery, tools and hardware; 6 million gallons of mineral oil; 3½ million dollars' worth of chemicals and medicines; 6 million dollars' worth of paper manufactures; over 1 million dollars' worth of cordage and twine, and large quantities of boots and shoes, soap, perfumeries and cosmetics, chinaware, glassware, brass and aluminum goods, automobiles and other carriages, smoking tobacco and oysters and other fish. Pacific coast foodstuffs received on the Atlantic seaboard via these isthmian railways included last year 528 million pounds of Hawaiian sugar, to be refined chiefly at New York and Philadelphia, 21 million pounds of prunes, 12 million pounds of raisins, over 5 million pounds of dried peaches, nearly 1 million pounds of dried apricots, 12½ million gallons of wines and 30 million pounds of canned salmon. Wool (12 million pounds), quicksilver, manufactures of leather, hops, copper in ore, matte and pigs; chemicals, asphaltum and lumber also figured to an appreciable extent in the movements of merchandise southward along the Pacific coast, eastward across the isthmian railways and northward along the Atlantic coast to our leading coast cities. Tehuantepec isthmus is a forgotten section in the present Mexican troubles. Word occasionally, however, comes from there. It shows that the isthmus while overlooked in the general melee, is not forgotten by Zapata and Huerta. The isthmus is so far disconnected from the main current of revolutionary events that until recently its geographical existence has been ignored. Now there are signs that it expects to be heard from whenever peace comes to Mexico and the reconstruction of the country begins. President Wilson's theories of constitutional government will find no suffragette bar in Tehuantepec such as may develop with the Indian women of other parts of Mexico. Women's rights have prevailed immemorially there, and when it comes to laying the foundation for permanent peace the Tehuana Indian women will be of more account than the men, as they have been under the tribal customs for centuries. Tehuantepec has other worries than the revolutionary disturbances, and these are what cause the disquiet over

the future and give a shadowy basis to the humor of a separatist movement. The cause is economic and relates to the question of transportation. The Panama canal may put the costly Tehuantepec railway practically out of business and render almost valueless the expensive port works at Salina Cruz, on the Pacific, and Coatzacoalcos, or Port Mexico, on the Atlantic. It is a possibility only and not anything more, but it is disquieting. That the canal will naturally reduce the trans-Tehuantepec traffic is a certainty. Tehuantepec was a rival of Panama almost from the time of Cortez. In the middle of the last century, when Americans built the railway across the isthmus of Panama, another group of Americans obtained concessions from the Mexican government for a line across the isthmus of Tehuantepec. Important explorations were made for the American navy department under the direction of Admiral Shufeldt, and for a time the question was whether a canal or a railway was the more feasible. Ultimately the concession was annulled. Along in the eighties some rails were laid, both from the Atlantic and the Pacific side, and a few years later the ends were united. When President Diaz had pushed through various railway enterprises in central and northern Mexico he turned to Tehuantepec and put the government back of that project. A new contract was made with the firm of Sir Weetman Pearson, the present Lord Cowdrey, who had successfully carried through the drainage project for the city of Mexico. Under the terms of the Pearson contract a working capital of \$7,000,000 was provided, and the government went into partnership with the Pearson firm on conditions which would make it the sole owner of the line and the terminals in fifty-one years. A large element in the total cost, which is said to have been approximately \$35,000,000, was for the harbor works at Salina Cruz and Coatzacoalcos. It was realized that without good harbor facilities interoceanic traffic could not be obtained. Salina Cruz is hardly more than an open roadstead, with the northeast trade winds from the Atlantic constantly churning the surf, and some serious engineering problems, including a refuge harbor and an inner harbor, had to be solved. The difficulties were overcome and Salina Cruz was made hospitable to traffic. When the road was completed its total length was a little under two hundred miles. The bird's flight from ocean to ocean across Tehuantepec is about one hundred and twenty-five miles. British interests here, as elsewhere in Mexico, are vitally concerned in the outcome. It is not presumed that Lord Cowdrey and his associates have transferred any of the obligations. They also secured valuable oil concessions on the isthmus of Tehuantepec and are understood to have large holdings of lands. The connection of Sir Lionel Garden, the British minister, with a land company in lower Mexico was explained in the news dispatches from the City of Mexico some time ago. At one time some American money was invested in the railway line known as the Pan-American, which branches off from the Tehuantepec railway at San Geronimo and runs down to the border of Guatemala. The money was in the bonds which were turned over to the American contractors as the different sections were completed. These bonds were guaranteed by the Mexican government. Later the government took over the railway and made it part of the Mexican system. Two American capitalists who had held official positions in Washington and in Mexico were the intermediaries. They were supposed to have made a good deal of money by the transaction. In view of later developments this may be doubted. They got control of the international bridge across the Suchiate river to Guatemala. But since President Cabrera of Guatemala was in no hurry to join up the Guatemalan lines with the bridge, the expected profits from the tolls on traffic across the river did not materialize.



Sir Lionel Garden.

HOME SUPPLY OF FRUITS AND VEGETABLES



(By W. M. KELLEY.) Our greatest joy in farming is growing a bountiful supply of palatable and nutritious fruits and vegetables for home use. There is nothing that draws the whole family into a closer spirit of unity than the hours spent working among the good things which a well-kept garden provides for the family table. For many years we have used one acre of ground, which is fenced chicken tight, to grow vegetables and small fruits for home use.

under for our vegetable garden. In this way the mulching material serves a twofold purpose—a cover for the vines and bushes during the winter and manure and humus-making material for the garden the next spring.

During the summer and fall months more than a comfortable living has been obtained from this one acre. It has provided everything in the way of fruits and vegetables except apples and potatoes, and a surplus of some things to exchange for groceries at the store. This garden adjoins the home grounds and is protected on the north by an apple orchard and on the east by two rows of evergreens. The portion occupied by peaches, plums, pears and quinces serves as a runway for the young chicks, which in turn benefit the trees by their droppings and destroying insects.

Tomatoes are set three feet apart and trained to barrel hoops fastened to stakes. This takes a little more time and labor than to allow them to spread over the ground, but the fruit is of better quality and ripens more evenly. We have found the Clark's Early Jewel, Acme and Ponderosa the most satisfactory varieties for home use.

A supply of peaches for two months is provided by the Carman, Alexander, Early Crawford, Champion, Elberta and Late Crawford, which gave us about 30 bushels last year. Twelve pear trees of nearly as many varieties, including the Bartlett, Bosc, Anjou, Clapp's Favorite, Blenheim Beauty Lawrence and Seckel, furnish plenty of this delicious fruit for eating from the hand and for canning purposes.

We grow cucumbers in rows and find it the most satisfactory way for a small plot. Early peas and string beans are planted in rows 24 inches apart, but late peas are planted in double rows with a 30-inch chicken wire between for the vines to run up on. We plant the Burpee Bush Lima bean instead of the pole beans, because they are much easier to grow.

The chicken-yard fence is hidden from the home grounds by the row of evergreens. The west side of the garden is devoted to grape vines and bush fruits. Two rows of grape vines 8x8 feet apart and tied up on wire trellis-work furnish plenty of this healthful and delicious fruit from the last week in August until frost comes. The varieties include the Worden, Moor's Early, Moor's Diamond, Concord, Niagara, Lindley, Agawam and Catawba. Next to the grape rows are the rows of bush fruits; one row each of currants, black raspberries, red raspberries and blackberries. Next to these rows of bush fruits one lone row is devoted to rhubarb, asparagus, and various herbs and medicinal plants.

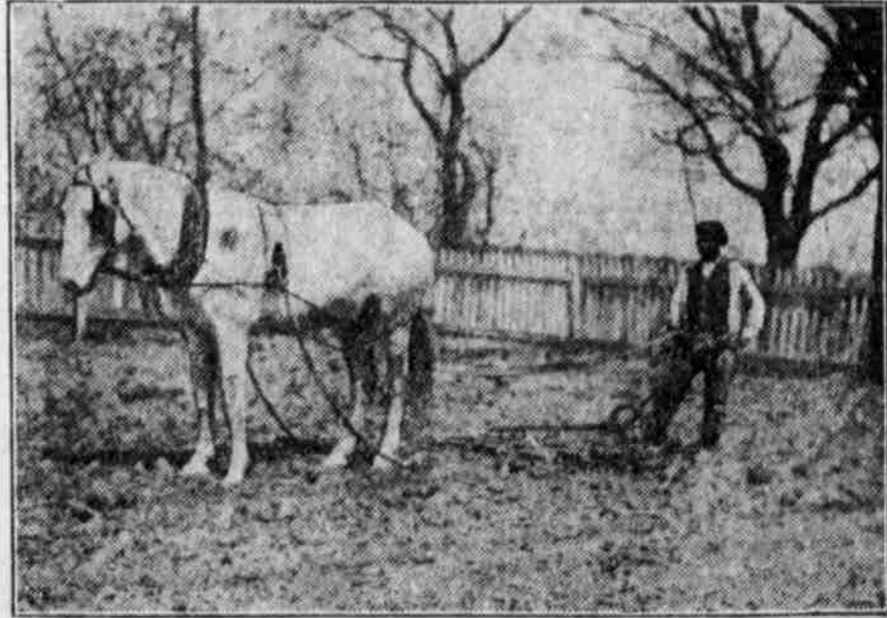
They are by no means as prolific, but two rows halfway through the garden gives us all we can use green shelled during their season and enough dry beans for winter. We grow peppers about the same as tomatoes, except that we do not train the plants to grow up on stakes or barrel hoops. We have practiced intensive culture with the best of results. By using plenty of manure, fertilizers and mulching material we have been able to get good crops each year. We plow deeply and apply lime, wood ashes and chemicals to the soil to keep it sweet and kill various insect pests. Such crops as onions, radishes, lettuce, beets, peas and cabbage that a light frost will not injure, are put in as soon as the soil will permit.

Among the bush fruits our favorite varieties for home use are Fay's Prolific and cherry currants, both large, vigorous growing bushes, which produce fruit of excellent quality. Of red raspberries we grow the Cuthbert, Ruby Red and Syracuse Red varieties. The Kansas and Cumberland are the most satisfactory of the black varieties.

As soon as these early vegetables are out of the way we replace them with cabbage, tomatoes, turnips and other late vegetables. We also plant seeds of the same vegetables at different times so that we may prolong their seasons. In this way we can have corn, tomatoes, peas, string beans and other early truck until in the fall. The surplus of beets, turnips, cabbages and other winter vegetables make a valuable supplement to the fowls' rations in the winter.

We also have a few bushes of the Columbia raspberry; a purple variety which is a strong grower, unexcelled for productiveness and desirable for canning. Our favorite blackberry is the Eldorado, which is the hardiest and sweetest blackberry we have ever grown. This variety matures strong, vigorous wood and has never winter-killed or failed to produce a full crop of the finest fruit. The berries are large, jet black, borne in large clusters, and ripen well together. It is a very promising berry.

We depend upon our own beds for about one-half of the plants we put out each year and usually buy from 200 to 300 plants of some of the standard varieties. Our favorite berries are the Dunlap, Glen Mary, Clyde and Marshall. The whole acre is inclosed with poultry-tight fence. This does not deprive the fowls of their liberty and they cannot injure the garden. No attempt has been made to plant and arrange fruits and vegetables artistically; and main effort has been to get the greatest return for the time and work expended. Ours is simply a farmer's home acre.



Of Great Help on the Home Acre.



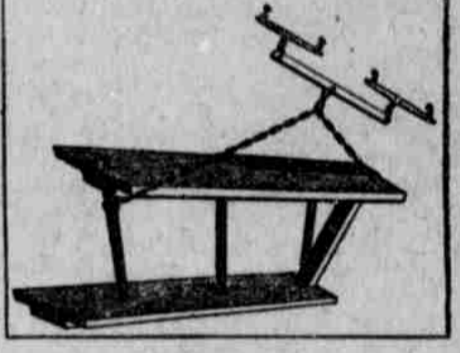
CONSTRUCTION OF ROAD DRAG

When Principles Are Thoroughly Understood and Intelligently Applied Work Is Simple.

(Prepared by the United States Department of Agriculture.)

Drags are often constructed of planks instead of logs. The plank should be strengthened along the middle line by a 2x6-inch strip. A triangular strip may be used under the lower edge of the blade to give it the proper cutting slope. The successful operation of the drag involves two principles, which when thoroughly understood and intelligently applied make road working with this implement very simple. The first concerns the length and position of the hitch, while the second deals with the position of the driver on the drag. For ordinary purposes the snatch link or clevis should be fastened far enough toward the blade end of the chain to force the unloaded drag to follow the team at an angle of 45 degrees. This will cause the earth to move along the face of the drag smoothly and will give comparatively light draft to the team, provided the driver rides in the line of draft.

If small weeds are to be cut or a furrow of earth is to be moved, the doubletree should be attached rather close to the ditch end of the drag. The drag will now move nearly ditch end foremost, and the driver should stand with one foot on the extreme forward end of the front slab. This will swing the drag back to the proper angle and will cause the blade to plow. This hitch requires slow and careful driving in order to prevent the



The Plank Drag.

drag from tipping forward. If the blade should plow too deeply, the driver should shift his weight toward the back slab. If straw and weeds clog the blade, they can usually be removed if the driver shifts his weight to a point as far as possible from the ditch or blade end. Usually two horses are enough to pull a drag over an ordinary earth road. When four horses are used they should be hitched to the drag by means of a four-horse evener. The team should be driven with one horse on either side of the right-hand wheel track or rut the full length of the portion to be dragged, and the return made over the other half of the roadway. The object of this treatment is to move earth toward the center of the roadway and to raise it gradually above the surrounding level. While this is being accomplished all mud-holes and ruts will be filled, into which traffic will pack the fresh earth.

EXPENSE OF ROAD BUILDING

Interesting Comparison Compiled by Department of Agriculture Showing Money Spent.

An interesting comparison between the expenditure on public roads in the United States in 1904 and in 1912 has just been compiled by the department of agriculture through its office of public roads, showing the tremendous growth that has taken place in the movement for better highways within the last eight years. In 1904 the total expenditures on all public roads in the United States was \$79,771,617, but in 1912 the expenditures for this purpose amounted to \$164,232,365. The expenditure per mile of public roads in the United States for 1904 was \$37.07, but the expenditures per mile for the year 1912 had doubled, amounting to \$74.65. The expenditure per inhabitant in 1904 was \$1.05, but in 1912 it amounted to \$1.78.

The greatest progress in road building has been made in the states which contribute from the state treasuries toward the construction of state-aid or trunk-line roads. In 1904 there were 13 states that contributed out of the general fund \$2,607,000, but in 1912 there were 35 states which contributed \$43,757,438. The states having the largest expenditures for state-aid and trunk-line roads in 1912 were as follows: New York, \$23,000,000; Pennsylvania, \$4,000,000; Maryland, \$3,370,000; Connecticut, \$3,000,000.

Both Questions Important. The subject of good roads is one that will not down, but the question of keeping good roads is quite as important.