

Asphalt Through the Ages:

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This issue of *Asphalt Through the Ages* features the recollections of Charles A. Godfrey placing asphalt in Central California from 1903 to 1906 with the Worswick Company. Two of the photos are from Charles Godfrey's records. The others are representative of paving practices at the turn of the century. Mr. Godfrey's daughter, Mrs. Vivian A. Wolfe of Pacific Grove, California, sent her father's recollections to the editor of the *Asphalt Quarterly* in 1958. Some of the streets that Mr. Godfrey helped construct in the early 1900s are still in use today.

Pioneering with Asphalt

(Recollections of Charles A. Godfrey)

I was on the ground floor with asphalt paving in Central California. In 1903 I was working for the Osborne Company in Fresno, laying cement sidewalks and granite curbs. When Osborne sold out to the Worswick Company, my continued services went with the deal. I was subsequently transferred to raking hot stuff on the street.

I worked for Worswick from 1903 to 1909. In that time, I worked on streets in Fresno, Merced, Modesto, Hanford and Hollister (San Benito County).

I did not work on Main Street in Visalia, but I did get a chance to see how the work was done. The mixing plant consisted of two halves of a large boiler mounted end to end. These were shored up with bricks over a fire pit. In one half boiler the ungraded rock or sand was heated, and in the other the asphalt was melted. The hot asphalt was lifted in buckets mounted on wooden poles and poured over the hot rock or sand. The mix was stirred by turning with scoop shovels and then put in the wagons with scoop shovels.

These horse drawn wagons had beds of loose boards. The mix was hauled about 4 blocks and dumped by turning the loose boards on edge. It was necessary to replace the boards frequently as they would soon be coated with asphalt. Once on the street, the mix was spread with scoop shovels and rakes. It was packed to grade by rolling with a three ton steam roller.

The earliest pavements had been laid with an asphalt topping over a cement base. Worswick developed the system we used. When he failed to get a patent, the idea was



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appropriated by a man named Warren and patented under the name Warrenite. The base concrete we laid was ungraded rock mixed with asphalt. I do not know the proportions. The topping was sand, asphalt, and I believe, a little cement. The base layer was 4 inches and the topping was 1-1/2 inches. It seems I remember that we used Trinidad Asphalt on part of this work.

Before the batch plant was built in Fresno, I saw men line up and catch hot asphalt in wheel barrows and wheel it four blocks. We also had hand rollers as well as the steam roller. We replaced a block of pavement in Fresno on Eye Street (now Broadway) between Maripose and Tulare Streets.

You must remember that all work was done mostly "by guess and by golly." Usually the asphalt was heated until it looked right. I don't know how the proportions were figured. All spreading and leveling was done with scoop shovels and ordinary garden rakes.

The best work was done in cool weather. It was hard to keep from overheating the mix in the summer. Try to imagine what it was like with the temperature around 120 degrees and then dumping that hot mix on the street and walking out on it to spread it out. In one day 25 men collapsed from the heat. I was the only one of the crew who stayed with it the whole day. We wore cotton socks, work shoes, clogs with 3-inch wooden soles and then wrapped our feet in several thicknesses of burlap. That still did not keep me from having several layers of blisters on my feet.

One of the major difficulties was to find rakers who could get an even grade and guess how deep to leave it so it would be the right thickness after rolling. I became expert enough to draw a premium wage of \$120 per month for a 60 hour week. Most men got 25 cents per hour.

The crew in Fresno was about 20 men, ten of whom were on the street. In three days we laid a 400 foot block of pavement.

I believe all the work we put in the first decade of this century is still in use. None needed repair for at least forty years and about all that has been done to any of it is a resurfacing job in the past ten years or so. Main Street in Visalia has survived several floods in addition to heavy traffic. ▲

