

Unique wave machine once helped keep city's streets dustless

By CAROLYN SWIFT

From salt to asphalt, footpath to fireplug and from boarded walk to concrete curb—streets have always expressed how well a town knows itself, and are visual displays of either pride or neglect.

Streets of Santa Cruz County communities have been wound, widened, cracked, flooded, forgotten, rerouted and repaired for more than 100 years. They have been turned into mud and pounded by horses; paved and lined with parked cars. They have filled with ruts and fallen off cliffs. The streets have been dumped with garbage, torn by storms and marched upon by parades. They have served as impromptu playgrounds for generations.

It has always been a chore to maintain the streets. While county roads were unpaved, it required a bit of ingenuity to keep travel about town a bearable experience.

Early residents discovered the best way to make a dirt road comfortably driveable was to

weigh the dust down with water. The most effective was salt water—which was both abundant and extremely cheap in Santa Cruz County. Salt water deposited on city streets mixed with humidity in the air and left a sticky salt substance that helped keep dust on the ground.

But removing salt water from the ocean in large quantities was another problem.

Just before 1900, an attempt was made to create the county's first alternate energy system. A "wave machine," was built as an experiment at Black Point off East Cliff Drive in Live Oak. The machine, or wave motor, was designed to pump water from the ocean to a large tank, and from the tank to the waterwagons that would wet down the streets.

The machine's apparatus and water tower were later moved and operated at a site off West Cliff Drive in Santa Cruz, where remains of the pump's shaft can still be seen. It functioned much the same way as a hand-pump, with the wave action providing

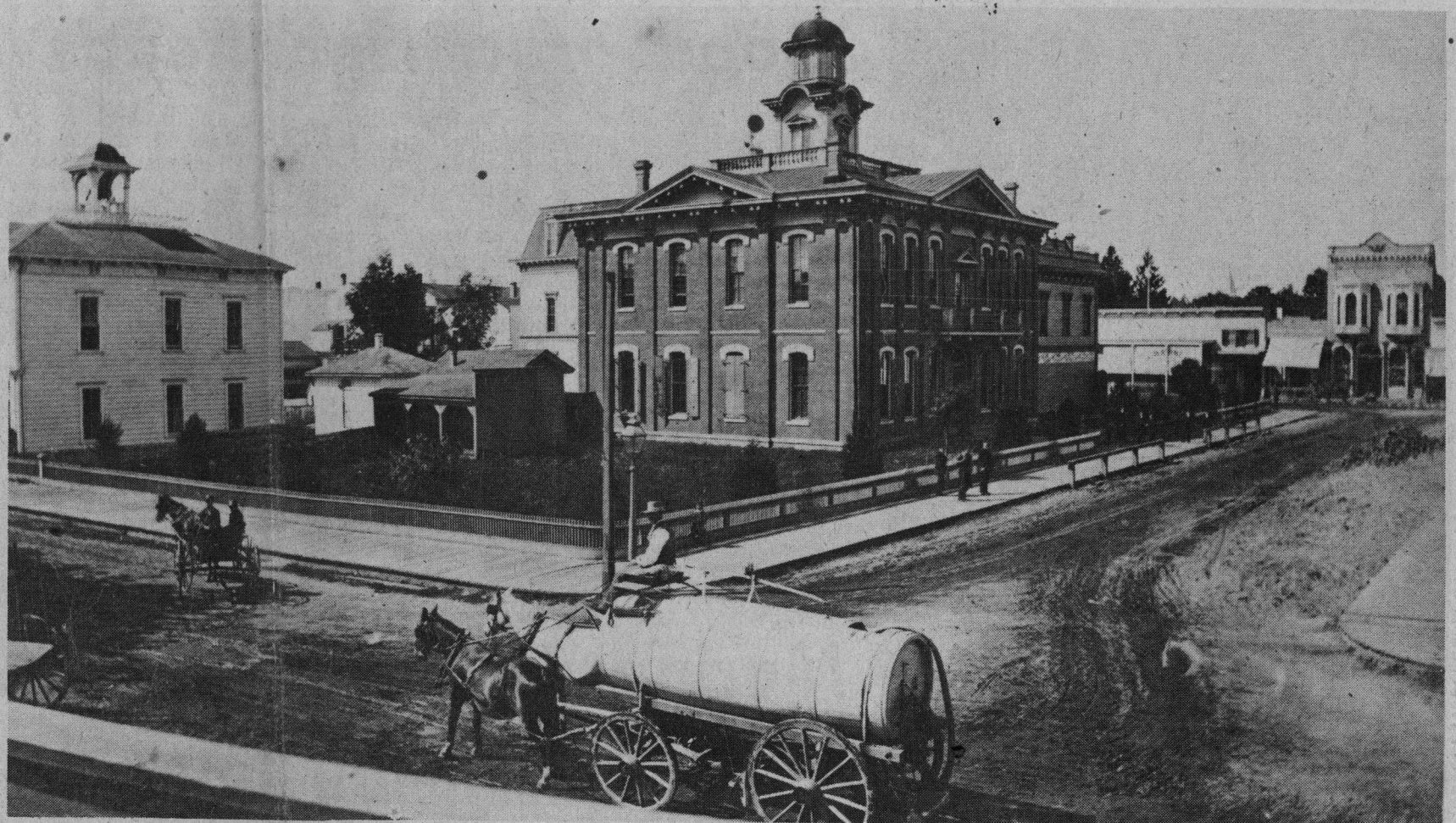
the muscle-power that forced the water into the storage tank.

Although costly to build, the wave machine was economical (it cost nothing to run the pump, and there was no charge for salt water) but by 1900, county engineers were experimenting with newer paving techniques.

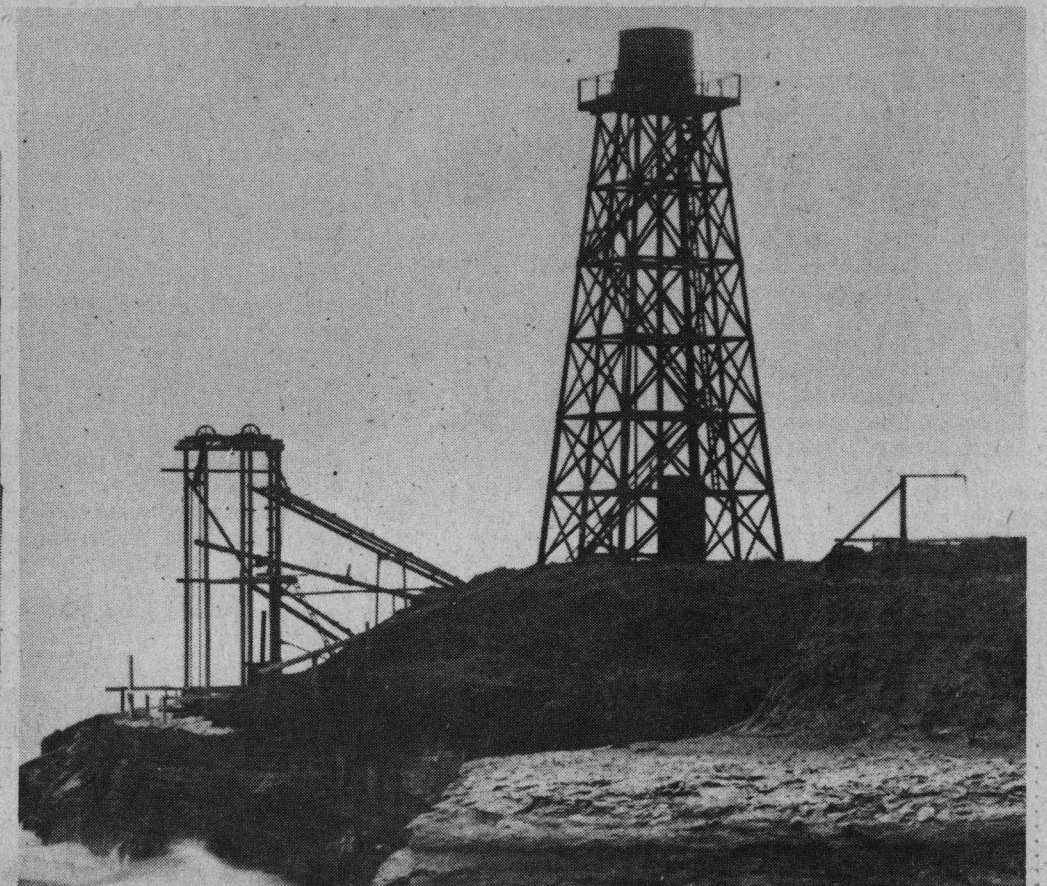
A bitumen mine in the hills north of Santa Cruz provided wagon-loads of paving material for city streets. The pavement was smoothed on the surface after it was boiled in tanks.

After Santa Cruz Portland Cement Company (now Lonestar Industries) opened in 1906 with a company town at Davenport, Portland cement became easily available for construction of concrete roads. Concrete roads appeared in Santa Cruz County early in the 1920s.

Concrete was expensive and tended to crack, but was long-lasting under normal conditions. By the 1950s, county streets and roads were paved with asphalt concrete—which is more self-sealing, smoother and more flexible.



Wagons hauling water were used to keep the streets free of flying dust. This photo was taken before 1880 at Front and Cooper St., Santa Cruz.



Bitumen was used for the paving of Front Street, Santa Cruz, in the spring of 1916.

Drink and drive at your own peril

The drinking driver has been given top priority by highway patrolmen over the Christmas and New Year's holiday weekends.

"If you drink and drive, we can almost promise you are going to be stopped," said highway patrol commander Capt. Don E. Anderson, in a holiday message to motorists today.

Extra patrolmen will on duty and officers will be working 12-hour shifts to concentrate on getting drunk drivers off the road, Anderson said.

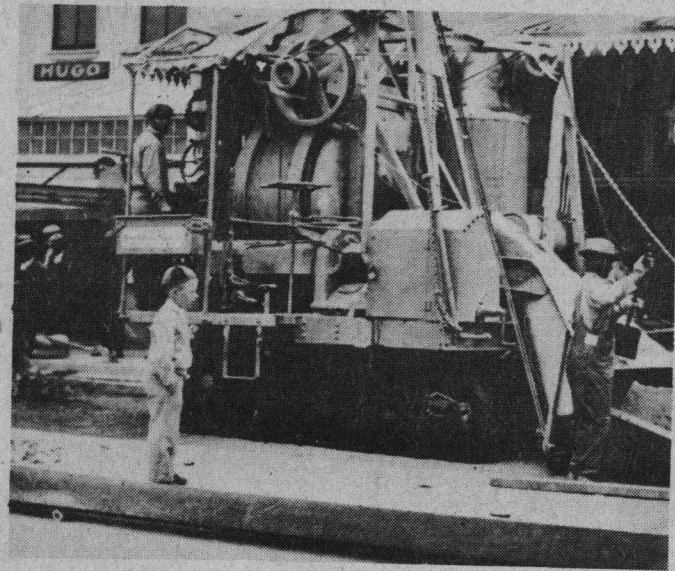
Court maneuver delays trial

A further court action seeking a change of venue for murder and rape suspect Richard A. Sommerhalder, 29, of Rio del Mar, will delay a rape trial set for next month.

Judge Charles Franich, of Santa Cruz County superior court, has denied a change of venue for Sommerhalder in both of Sommerhalder's trials, one for murder of two women and the second for rape of two other women.

The judge was informed Tuesday, that the state appellate court has upheld his decision, but defense lawyer Gerald Christensen said he has now taken the appeal to the state supreme court.

The "wave machine" was an early county attempt at an alternate energy system. This photograph was taken in 1905 west of Lighthouse field on West Cliff Drive in Santa Cruz.



This was an odd-shaped cement mixer used for a paving job on Pacific Avenue, Santa Cruz, about 1924.



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