

# COSMOPOLITAN CHRONICLE

True tales from the annals of history, archaeology, construction, and restoration of the Casa de Bandini and Cosmopolitan Hotel.  
Old Town San Diego State Historic Park

VOL. II. No. 22

SAN DIEGO, ALTA CALIFORNIA, FEBRUARY 6, 2009

PRICE: FREE

## Lighting

Gregg Giacomuzzi

Interpreter

San Diego Coast District

### History of 19th Century

#### Lighting

Lighting technology changed in many ways during the 19th century. Homes and businesses were much darker and ambient light was utilized its fullest extent. Doors and windows were left open and people worked by natural light from sun up to sun set. Interior adobe walls were white washed to help create more reflection as candles illuminated interior spaces. Candles, made of cattle fat or tallow, were being produced in great quantity due to the large cattle herds on the great Southern Californio ranchos.

Candle lamps and lanterns were made of tin, pewter; sheet iron, wrought iron, and/or glass, which were hung on a nail or hook. Many of the lanterns were decorated with elaborate piercing designs.

It wasn't until the mid 1840s and early 1850s; change came about in the form of "burning fuels" like whale oil or camphene (distilled turpentine). Whale oil was readily available in San Diego as whalers would cruise along the California coastline killing large pods of whales for their prized

fat, bone, and baleen. Camphene, in turn, produced from what appeared to be inexhaustible supplies of corn and pine trees in Northern California.

Burning fuels which produce a low viscosity, flow ready up a wick: thus creating a clean white flame. The fixtures themselves were the first truly adjustable lighting device and the produced a brilliance from six to eight candles. These new types of fuels worked for a short time but the rise in cost of whale oil and the fact that camphene exploded when fixtures were dropped led to new innovations.

Kerosene, also called coal oil, is an oil distillate consisting of a mixture of hydrocarbons, primarily derived from coal, oil shale, or refined petroleum. Kerosene, first developed in the late 1850s became the cheap fuel source by the following decade because of an increase in oil production.

As a result kerosene lighting fixtures soon became standard until communities changed over to gas.

### The Cosmopolitan

The Cosmopolitan Hotel was constructed in 1869 by Albert Seeley. In doing so Seeley converted the one-story adobe, one story, Bandini family home, into a two-story hotel and stage stop. We, currently have neither visual documentation nor written accounts of the type of lighting Seeley installed. We know based on general knowledge of the time period

that kerosene lighting was the most common lighting technology used at this time.

### Challenge

California State Parks and Delaware North has the unique challenge to rehabilitate and restore this original 19th century building into a fully functional 21st century hotel and eating establishment. As partners in this endeavor, we hope to create a building that will personify the "look, feel, and ambiance" of a period appropriate setting. A key element to this setting is lighting.

We look to install period lighting in majority of the areas where the fixtures themselves are in a public view shed. Most of these selected period reproduction fixtures are constructed of materials used in the 19th century and are nearly identical in appearance.

We have made a conscious decision, based on overall safety, that fixtures will not use kerosene as a fuel source. The lighting fixtures will be electric, up to modern codes, and in most cases the electrical elements will be hidden, utilizing frosted chimneys and light bulbs that produce a warm glow or illumination. We hope lighting will be both functional and one of many visuals elements that will enhance the visitor experience.

