

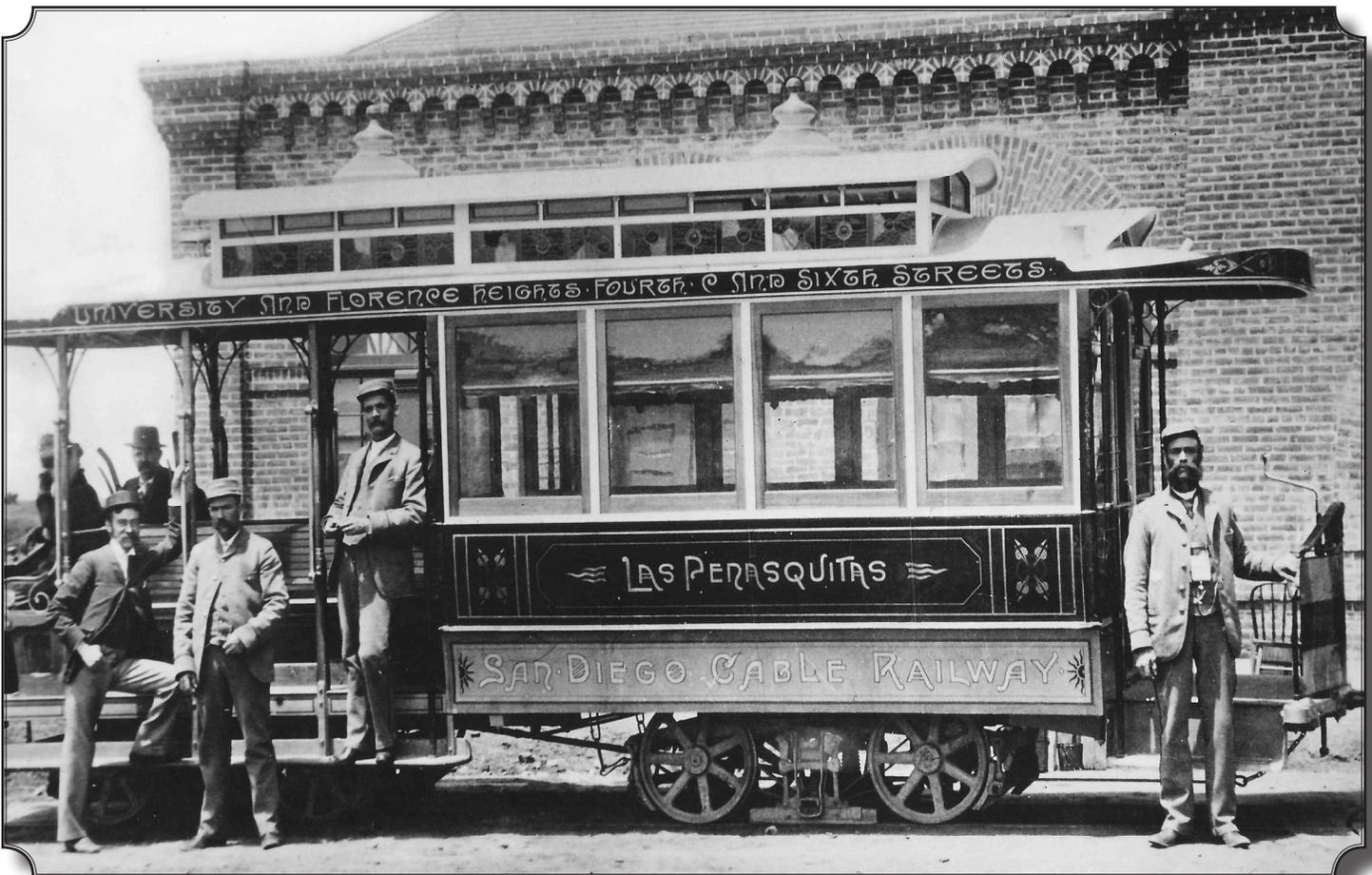
# SAN DIEGO ELECTRIC RAILWAY ASSOCIATION



## Trolley Lines

February 2016

## SAN DIEGO'S GRIP CARS



By  
Richard V.

Have you ever ridden on a cable car of a street railway? If so, wasn't your first trip a memorable experience? Today the only representative cable car service remaining is the heritage of the City of San Francisco, the birthplace of the first successful grip car. If you have never had the thrill of watching

the gripman manipulate the levers and pedals, of sliding down the longitudinal seats when operating on steep hills or of grabbing a stanchion at the warning call "Look out for the curve", do make a trip to San Francisco before it is too late.

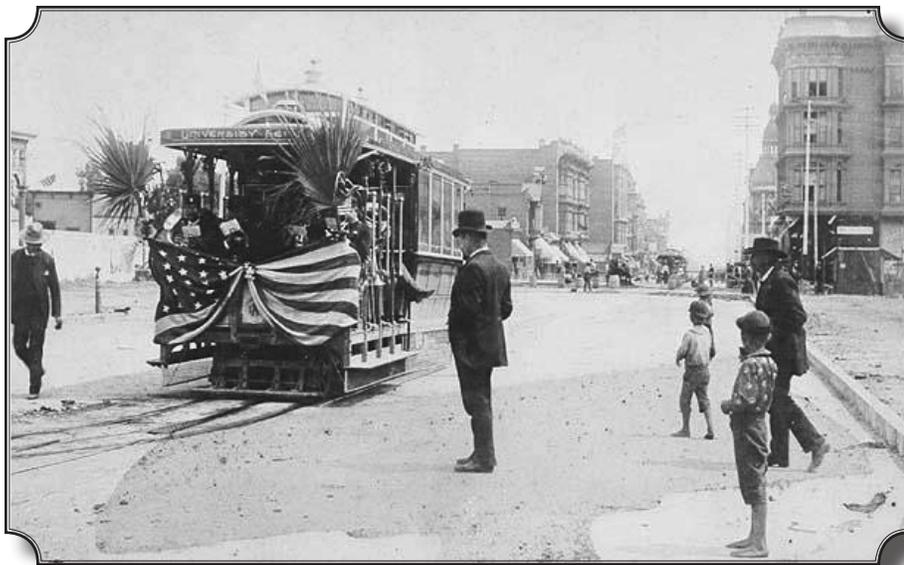
Three routes are still operated but the antiquated cable car is doomed to vanish some sad day.

**Continued on page 2**

**Grip cars from page 1**

The origin of the underground cable-propelled car is said to have been the result of a tender-hearted man witnessing a cruel horse car accident. Andrew S. Hallidie, born in London in 1836, came to San Francisco with his family in 1852. Soon he turned his endeavors, as you might expect, to prospecting for gold in the Sierra foothills.

Four years later he established a wire rope mill in San Francisco. There he developed plans for aerial tram ways for the transporting of ores and supplies from and to mines in mountainous terrain. He had noted the great difficulties experienced in the operation of street cars on the City by the Golden Gate's hilly routes. As many as four horses were frequently required. One cold, rainy evening in 1869, people, eager to reach home, crowded a car to more than its rated capacity. In fact, there wasn't even a hand and toe hold for the proverbial just one more. The horses had painful difficulty in getting started. When half a block up a hill, one horse slipped and fell. The driver immediately wound up the brake staff so tightly that the chain which sets the brakes snapped in two.

**Continued on page 9**

Cable car named "El Escondido" led the triumphal procession on the inaugural day, June 7, 1890. It is about to take the switch in Sixth Avenue to swing around onto the north track on C Street. The second car, following at E Street, is the "San Juan Capistrano." (Title Insurance- Trust Co., Union Title Office, San Diego, Calif., historical collection)

*On the cover:*

San Diego Cable Railway Co. Car "Las Penasquitas" at the power house in 1890.

Frank Van Vleck, the car's designer and chief engineer on the left.

(Collection of Fred Reif collection & Title Insurance & Trust Co.)

Editors note: If the car looks a little familiar, it should. Our own Car # 54 was built from two of these



San Diego Electric Railway Association  
DBA San Diego Electric Railway Co. Inc  
922 West 23rd Street  
National City, CA 91950  
(619) 474-4400

**In the December 2015 issue:**

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SDERA operates the historic National City Depot museum which is located at 922 West 23rd Street, National City, CA 91950 and is open Saturday and Sunday from 10 a.m. to 4 p.m. Or visit us on the web at: [www.sdera.org](http://www.sdera.org)

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- ❖ John De Lalla - Special Events/ Docent Coordinator
- ❖ Bill Steinmetz-Groundskeeper



A Salute To Our  
Volunteers!  
They are as follows:

- Jim Anderson
- Jason Ballard
- Robert Baxter
- Mitch Beauchamp
- Chuck Bencik
- Randy Butler
- Robert Butler
- Tom Carnes
- Missy Cheeseman
- John DeLalla
- Richard Finch
- George Geyer
- Conrad Gomez
- Chris Higgins
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- Mike Reading
- Mike Reneau
- Tom Sapien
- Dave Slater
- Bill Steinmetz
- Jody Surowiec
- Jeff Trimble
- Matt Zacharzuk

WE COULDN'T  
OPERATE WITHOUT  
YOU!  
Thanks!

URGENT REQUEST  
FOR VOLUNTEER  
DOCENTS AND  
CASHIERS

Please consider sharing your  
interest in railroads and  
San Diego's historic streetcars  
with our visitors.

Our dedicated group of  
docents needs your help to  
ensure that the Depot is  
properly staffed.

Docents guide our visitors  
through the depot and the  
grounds.

Training and support are  
provided by our docent  
coordinator and other  
experienced docents. Reference  
material is on hand, including  
talking points for the tour, and  
general procedures for operating  
the depot. Shifts are for 3 hours:  
10 AM to 1:00 PM, and  
1:00 PM to 4:00 PM.

Please contact John DeLalla  
at: docents@sdera.org  
or 858-847-3138

for additional information and to  
join our group of docents.



**SAN DIEGO ELECTRIC RAILWAY  
ASSOCIATION, INC.**

**Membership Application**

- Mr.                       Mrs.
- Ms.                       Corporation (If Applicable)

Last Name \_\_\_\_\_

First Name \_\_\_\_\_ Middle Initial \_\_\_\_\_

Family Name (s): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone (Home) \_\_\_\_\_

Telephone (Work) \_\_\_\_\_

Email: \_\_\_\_\_

**Address:**

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City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

**Membership Classification Desired  
(Check appropriate box)**

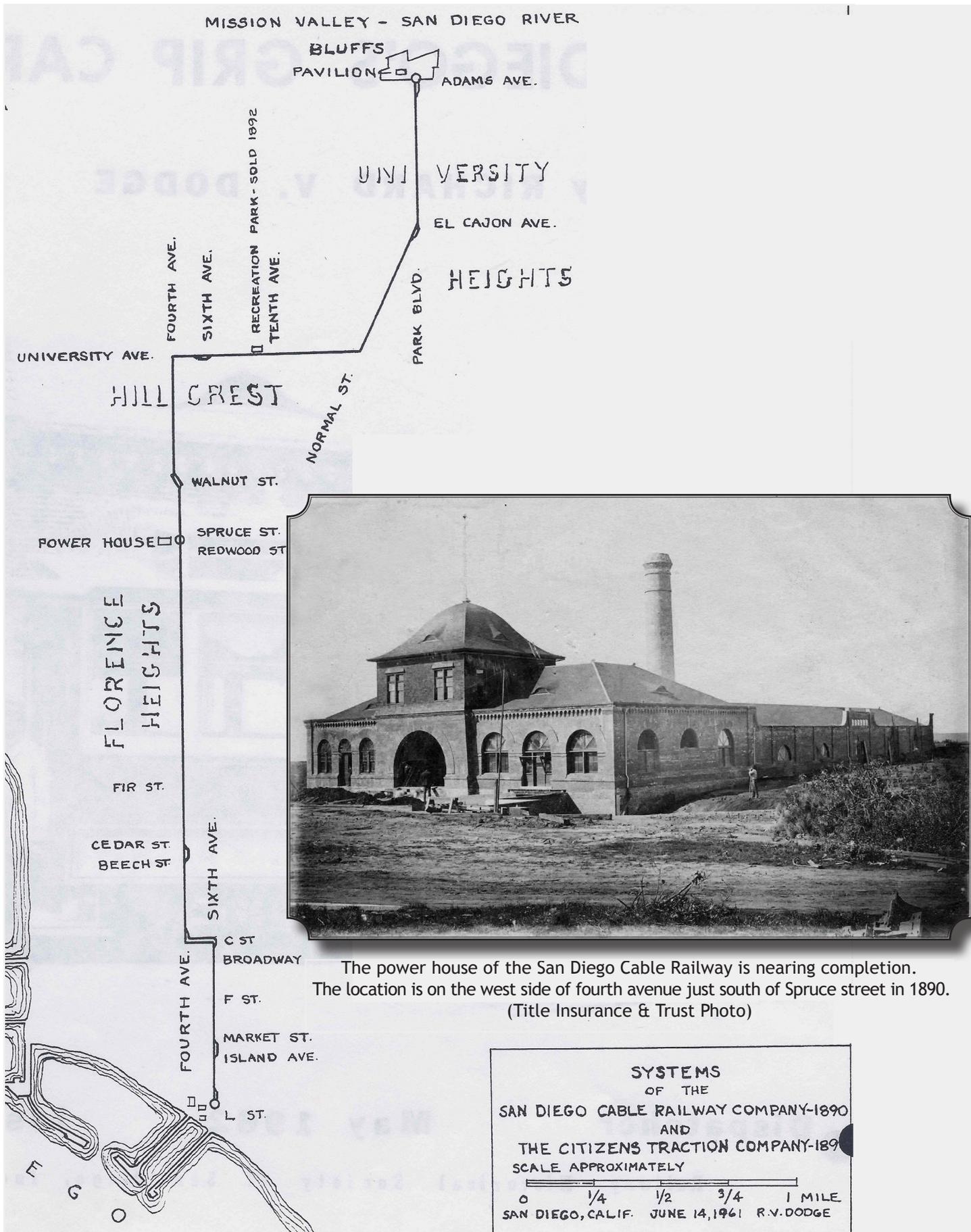
- Student (Passenger)**  
\$15 yearly
- Senior (Conductor)**  
\$15 yearly
- Regular (Motorman)**  
\$25 yearly
- Family (Maintenance Crew)** \$35/yearly
- Life (dispatcher)**  
\$400/one-time
- Corporate (Inspector)** \$500  
minimum yearly

Please send this application, payment for membership,  
and optional contribution of \_\_\_\_\_ to:

San Diego Electric Railway Association, Inc.  
DBA: The San Diego Electric Railway Co.

Attention Members: Please look carefully  
at the mailing label. If your membership  
has expired, or will  
expire soon, and you wish to renew  
your membership, or become a new  
member, we offer the following levels:  
Life, (for a single member) \$400; Family,  
\$35 (please include names); Regular (or  
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\$15; Junior for ages 17 and below, \$15.  
Checks can be made out to, SDERA  
and mailed to  
SDERA, 922 West 23rd Street,  
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*Come visit,  
and enjoy all the improvements  
in your Museum!*



**SYSTEMS  
OF THE  
SAN DIEGO CABLE RAILWAY COMPANY-1890  
AND  
THE CITIZENS TRACTION COMPANY-189**

SCALE APPROXIMATELY

0      1/4      1/2      3/4      1 MILE

SAN DIEGO, CALIF. JUNE 14, 1961 R.V. DODGE

### Grip cars from page 1

The car rolled backwards, dragging the bodies of the unfortunate horses over the cobble stones. The animals had to be put out of their misery. Then and there Hallidie determined that horses should be replaced with cable propelled cars.

By 1872, he had organized a company and plans were begun. The difficulties to be overcome were stupendous. All parts had to be designed and fabricated. A sizable power plant with steam boilers, engines and machinery was a necessity.

Clay Street was selected for the demonstration. It had to be trenched, a channel or conduit formed, pulleys installed, track and slot rails laid, wire rope strung and spliced to form an endless cable and a grip designed which could be clamped around the cable or released by an operator. A small four-wheeled car, of the future "dummy" type, was obtained to carry the grip and the gripman. Obstacles were overcome. The crucial test came early in the morning of foggy August 1, 1873.

The dummy was pushed to the end of the slot rails where the grip could be adjusted into operating position at the top of the steep hill at Jones Street. No one except Hallidie had the courage to risk the handling of the controls on the awe-inspiring descent. He, confidently, released the brake, turned the hand wheel, the grip clamped onto the moving cable and the car gracefully rolled down to Kearny Street, completely under control. The distance was six blocks. At the lower terminus, the dummy was turned and climbed back to Jones Street without a hitch.

The Clay Street Hill Railroad was a phenomenal success. It was soon perfected and extended. Within a short time other cable roads were organized and networks were constructed, not only in San Francisco but in most large cities of the nation.

Cables boomed Kansas City! Property values along car routes zoomed 50 to 600 per cent. Just look what they did for Nob Hill in San Francisco! That community has more cable lines than any other city in the world, over 100 miles of them. Companies are operating prosperously in Seattle, Portland and Los Angeles. They are a necessity here in San Diego for the development of the mesa areas:

Florence Heights, what is now Hillcrest and University Heights. So opined the still optimistic realtors of the day.

San Diego had its horse car system and steam dummy and motor roads.

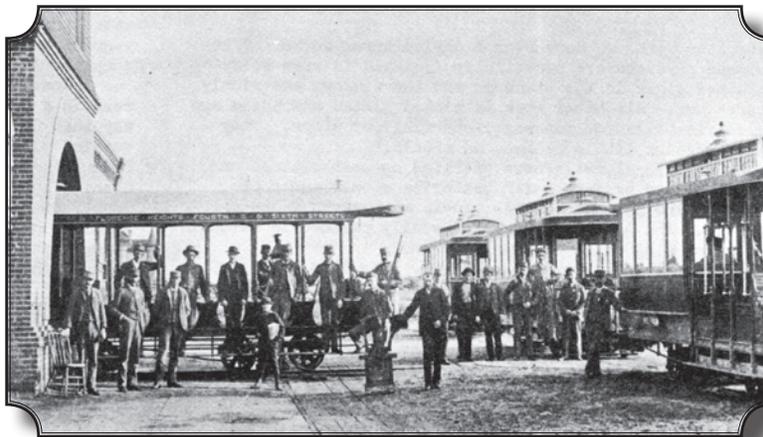
It had tried out primitive electric street car lines.

The great Land Boom of the 1880's had sagged alarmingly, the city's

population was dwindling (the 1890 Census listed only 15,159 persons), and a stout stimulus was needed to sustain property development

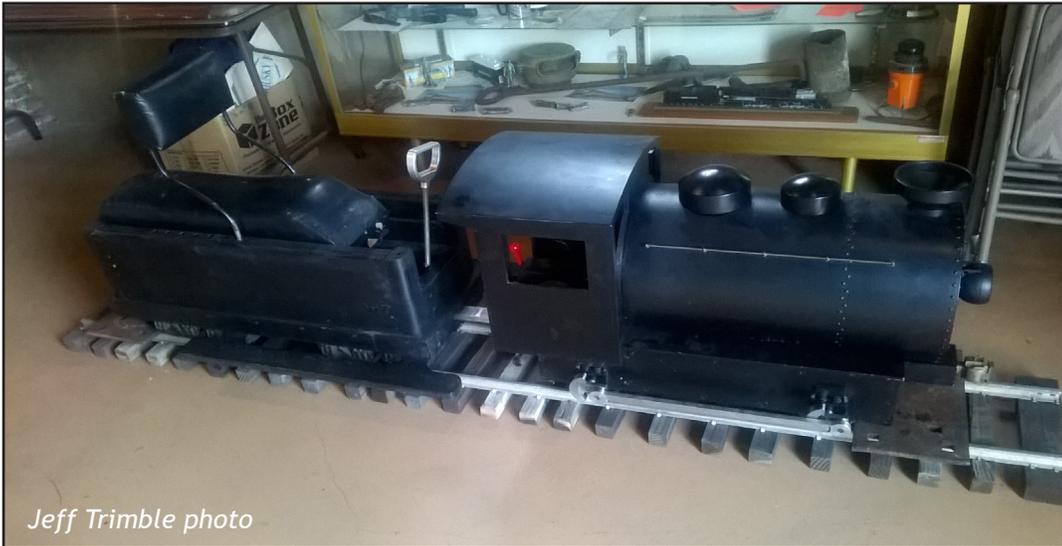
There was no two ways about it. A cable road was essential to growth.

**Here ends part one of another one of Richard V. Dodge's fascinating and in depth accounts of San Diego's transit history re printed from the May 1962 issue of the "Dispatcher" from the Railway Historical Society of San Diego.**



Three combination cable cars are shown here standing on Fourth Avenue, south of Spruce Street, while the rear section of one of the open cars protrudes from the doorway of the Car House. A cable grip assembly stands on the ground alongside the open door.

# AT THE DEPOT



Jeff Trimble photo

Mike Reading, Scott Lewis, Tim Lewis and Tim Higgins All worked on reassembling latest addition to our collection. This locomotive was donated by Rachel J. Barker in memory of her late husband, Baltazar J. Howland! The locomotive was built by Baltazar's father sometime in the 70s or 80s. He was a member of the Orange County Live Steamers and the LA Live Steamers clubs.

**Herbie** our Brill streetcar replica is in desperate need of some tender loving care. Along with needing a new coat of paint; there are areas of dry rot that will need to be replaced if the car is to remain on display to the public. If there any members with paint and wood-working skills that would like to help in the restoration please call Mike Redding. Donations can also be made on line at: <http://sdera.org>

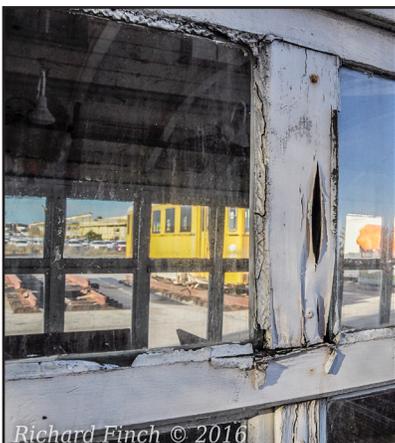


Richard Finch © 2016



Richard Finch © 2016

The rear doors no longer operate and may need to be replaced



Richard Finch © 2016



Richard Finch © 2016



Richard Finch © 2016

## SOME THOUGHTS ON THE SDERA ACQUISITION OF THE END SECTION OF CAR 422

By

P. Allen Copeland

I was very surprised to read in the December SDERA "Trolley Lines" that the restaurant in the Metropolitan Transit Systems building at 12th & Imperial had closed, and that the end section of San Diego Electric Railway car No. 422 had been disposed of. I am thankful that this relic has been acquired by the SDERA and is now an exhibit at the National City Depot. Hopefully a replacement headlight and the left hand flasher warning light can be found for the car end.

I can add a bit to the history of the streetcar this end section was a part of. As mentioned in the article, in 1923 the San Diego Electric Railway ordered 50 cars on SDER General Managers Order (GMO) #2291 from the American Car Co. of St. Louis, Missouri. The cars were built on American Car Co. order #1345 and completed by 12-3-1923. The cars were paid for with 25% of the order being paid in cash, and 75% through the sale of Equipment Trust Certificates.

The stated purpose was to replace the Class 2 "Sowbelly" cars, which had a 10-year life expectancy and would be fully depreciated as of 12-31-1924. However another purpose was to acquire equipment which would be suitable on the lines to the western beaches and the new line to La Jolla, which opened 7-1-1924. The cars were assigned nos. 400-449, SDER class 5.

The exact dates of delivery of the 50 cars is not known. Nos. 400-407, 411-413 were delivered in late December, 1923, while the others followed through March, 1924. Number 422 was on hand sometime in January, 1924. As built the cars were equipped with pantograph for use on the beach lines. The overhead was rebuilt for pantograph operation on many of the "uptown" lines on which these cars were scheduled to operate as well. However, soon after delivery the cars were equipped with a trolley pole on the end away from the pantograph.



The front end of Car # 422 soon to be on display at the Depot

Problems with the pantograph operation led to their removal and the equipping the cars with a second trolley pole by December 1924. The roof platforms on which the pantograph were mounted were left on the cars due to cost considerations. In SDER records, 72 sets of pantograph were sold for scrap in 1927.

As delivered, the cars were capable of multiple unit (coupled) operation, where several cars could be operated by one man. The couplers contained all electrical, pneumatic and mechanical connections and cars could be coupled/uncoupled while at speed or standing still. Pictures exist of six cars running together, but the normal operation on the beach lines was two or three cars. On runs to La Jolla a trailer car was operated as far as the Ocean Beach Junction, where the car was uncoupled and operated separately over the #14 Ocean Beach Line. On inbound runs, the Ocean Beach car was coupled to the rear of the La Jolla car for operation into downtown.

On the uptown lines, single car operation was the rule. There are hints that the La Playa/Point Loma line also operated multiple unit cars in conjunction with the La Jolla Line, but longer headways made this operation impractical and the line became separately operated.

Continued on page 8

### Car 422 Continued from page 7

The cars were equipped so that they could be operated with a single operator, who ran and the car and collected fares, issued transfers, etc. In times of heavy traffic, the cars could also be operated with a conductor, who handled the fare collection. Generally however, the cars were operated by one-man.

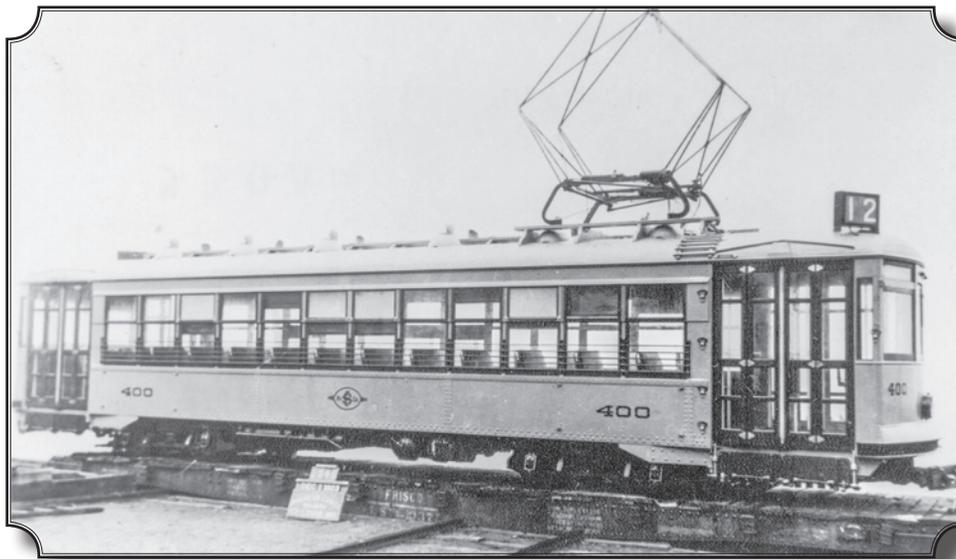
Starting in September, 1931 a program was started to reduce the weight of many of the Class 5 cars. This included removing the couplers, multiple unit control and field taps, and the large air compressor. A smaller compressor was installed and link and pin couplers applied for emergency towing.

The highest numbered cars were the first to be rebuilt, Nos. 416-449 on SDER GMO 2861 dated 9-28-1931, and nos. 411-415 on GMO 2925 dated 7-10-1933.

Cars 400-409, which were the last cars used on the La Jolla Line were scheduled to be rebuilt on a work order dated 9-18-1937. However, this work was never completed; they kept their original controls and air compressor, but did have their couplers removed by 1940. Car No. 422 went through this weight reduction program and was released for service on 9-30-1932.

Regarding the lines to the western beaches, the #13 La Playa/Point Loma line was converted to bus on January 19, 1937. The #14 Ocean Beach line was converted to bus on Dec. 19, 1938, and on September 15, 1940 the La Jolla line was converted.

Thereafter, Nos. 400-449 were used on lines 1, 3, 4, 7, 9, 11, and 12. By this time, PCC Nos. 501-528 provided all service on route 2, and some on Route 3. As traffic due to World War Two increased, the 400's were replaced by other equipment on lines 3, 4, 9 and 12. The #1 line was "temporarily" converted to motor coach on June 30, 1946 (streetcar service never resumed due to construction of a new bridge over the Cabrillo Freeway). The 400's were put back on line 3 after the PCC's were moved to Adams Ave. Barn for use on routes 2, 7 and 11 on Sept. 15, 1946.



St Louis Car Company photo of car 400 with the pantograph installed

The original yellow paint scheme was changed to a green and cream scheme in the early 1930's. The ends featured a design which some have called a "bow tie".

In 1935, lettering on the side was added reading "San Diego – The Exposition City 1935". The following year the lettering had the lettering changed to "San Diego – The Exposition City 1936". After the exposition was over, slogans were placed on the side of the car, such as "Visit The Zoo – Balboa Park Car 7 or 11". Other slogans are known as well, but this is too complicated to discuss in this short letter about car no. 422.

Starting in August, 1944, the SDER experimented with changing the color scheme to a orange-red and cream scheme. Some buses were repainted, as was PCC Car no.520 and Coronado



car No. 351. Yet another PCC (the number of which is not presently known) had a much more complex paint change. However, on all this equipment the paint was later changed back to green and cream. A number of the 400's were repainted in the orange and cream scheme, but a complete list is not available. It is known that cars 408, 422, 424, 425, 435, and 440 carried this scheme, there were probably others including 437 and 448. Some of these cars were repainted back to the green and cream scheme, but a number of cars remained to the end of streetcar service in the red-orange and cream paint, which became very shabby and dingy looking. A color

picture of car 408 in the orange/red and cream, taken by the late Robert T. McVay appears on page 12 Of "California Trolleys In Color-Vol. I-San Diego & Los Angeles".

After World War Two, traffic levels on the SDER plunged as people returned to their automobiles and the area's military and defense activities decreased. With the conversion of the No. 3 "Mission Hills" line to motor coach on June 1, 1947, general maintenance (including painting) of streetcars ceased, and all rail equipment except for the 400's and PCC cars were sold for use as dwellings or for scrap. 11 class 5 cars were placed in dead storage in the remains of the Imperial Ave. barn, and were stripped for parts to keep the others in service. This included car No. 422. Generally these cars had some mechanical problems, such as bad wheels, motors, or body damage. The defects for No. 422 were not detailed

in a report dated 4-14-1948, just that it was unsurvivable.

After the conversion of the 2, 7 and 11 lines to motor coach on April 24, 1949, the streetcar fleet was stored at, or in, the Adams Avenue barn. The cars in storage at the Imperial barn were towed to Adams Ave. as well. The company hoped to sell the cars for further use, perhaps to Mexico or South America, but this was not to be. In 1951, all 50 400's and the three remaining work cars were sold for scrap to the Allied Salvage Co. and hauled by truck to a lot in National City at the corner of Main and Rigel. The cars sat there for some time off

their trucks before being torn apart for scrap in December, 1952. The body of car No. 422, still in a rusty orange and cream paint was at one end of a long row of streetcars and the body was not scrapped, but was used as a watchman's shelter and office. Sometime later, the property was sold to the San Diego Mattress Co., and the remaining body used to store mattress stuffing and



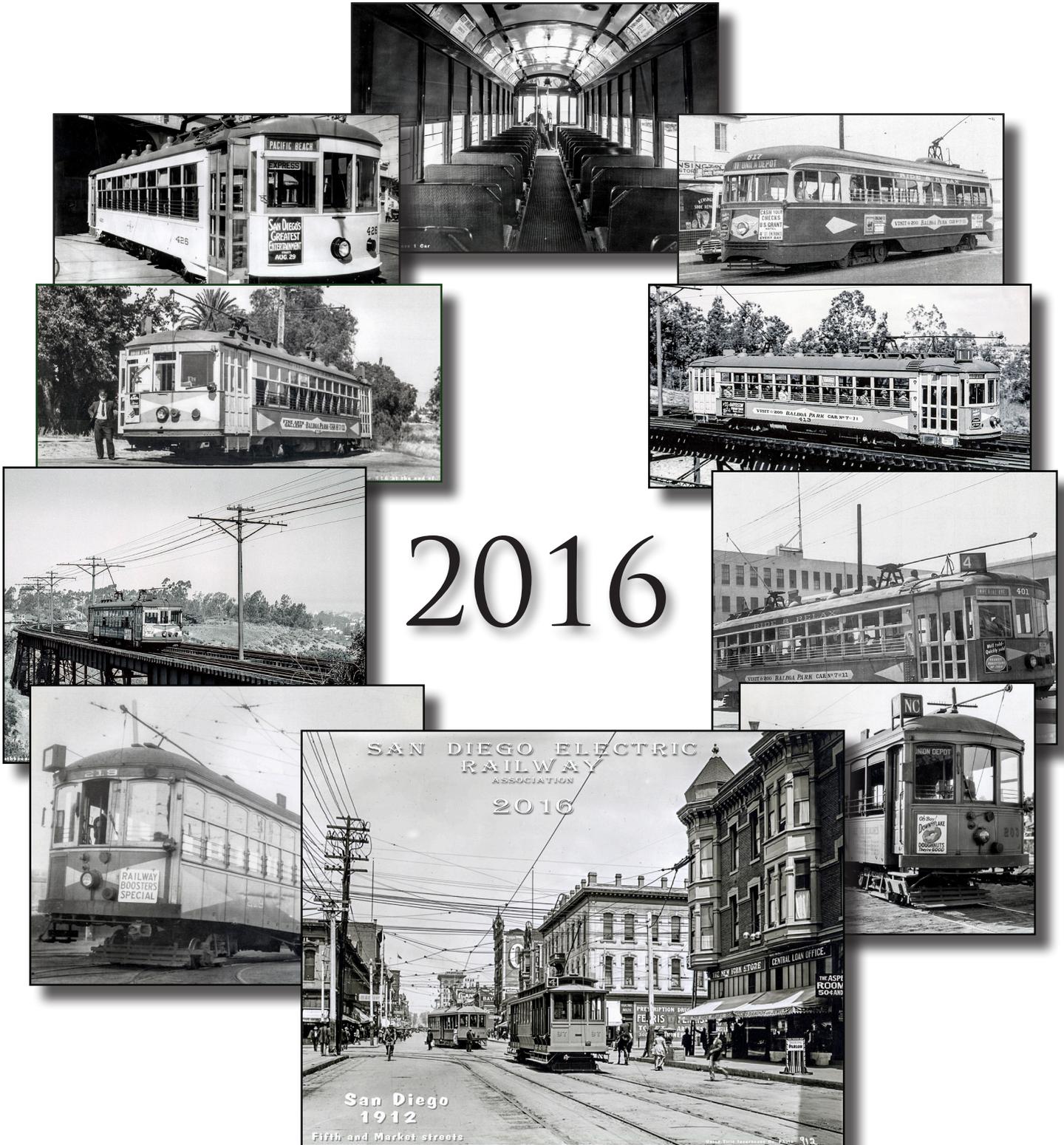
Multi-unit at Kettner and Broadway in 1925.

Note that the lead car is headed to Ocean Beach ( route 14 ) and the trailing unit is going on the La Jolla ( route 16 )

other materials. One end of the car was removed by the time I was able to visit the carbody about 1957. Most local railfans in the 1950's and 1960's knew about this carbody, but a lack of money and other resources kept anything from being done. When one end of the carbody was saved for the restraint, there was much appreciation for whoever was responsible for saving this relic.

P. Allen Copeland  
January 9, 2016

# 2016



HERE IS A SNEAK PREVIEW OF SOME OF THE PHOTOS THAT WILL BE FEATURED IN THE NEW SDERA CALENDER FOR 2016

By popular demand the 2016 Calender is now Available for those who are looking to fill those Christmas stockings early. Go to [SDERA.org](http://SDERA.org) for more information.

Contains photographs printed on 11 by 8 1/2 inch heavy weight paper stock suitable for framing.



# LETTERS TO THE EDITOR

To: editor@sdera.org    **Subject: horse putty**

Hey Richard, in the Dec 2015 issue, I really enjoyed the lead article re: the Horse Cars, especially the one that was made into a shed. So.... of course, I thought the story could use abit of epilogue, so here's a question...

Right off the bat, it was moved from Chollas Valley to the home of the Gerdes in spring valley, ok and then "in 1987 MRS Gerdes donated the horse car parts .... to the SDERA."

Where are they???? PHYSICALLY where are they?? The horse car parts. NOT the notes or sketches or other items... this lover of SD history is wondering (and no doubt many others are too.. seems to be the way with me.. I ask, what's on everybody's mind..) WHERE ARE THE PARTS??

Engaging research...

knows a lot of useless info

Mitch K

Hi Mitch

Where are they?; That is a very good question, and one that has perplexed me since uncovering the article and its notes. All of my inquiries have turned up empty as many of our members from that time are no longer with us. It has been my hope that in publishing the article (which was originally meant [I believe] to help raise funds for a restoration project in the 1990s), that more information might surface to answer your question. By publishing the article I am hoping to spark some more discussion about the project.

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## ORDER FORM FOR THE 2016 PHOTO CALENDER

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off I-5 at Mile of Cars Way - take Bay Marina  
Dr. west, right on Cleveland, go one block and  
left on W. 23rd St and straight into the Depot  
Open Saturday and Sunday, 10AM — 4 PM.  
Depot phone: call (619) 474-4400

**To submit items to the Newsletter, contact : Richard Finch via e-mail ([editor@sdera.org](mailto:editor@sdera.org))**  
**Items need to be submitted by the 10th of the month prior to publication. -- Next issue in April**  
Please send all photos in the largest size as possible. 2 or 3 meg file ( about 1000 pixels on the longest side)  
also include the names from left to right of people in the photos.

Attention Members: Please look carefully at the mailing label. If your membership has expired, or will expire soon, and you wish to renew your membership, or become a new member, we offer the following levels: Life, (for a single member) \$400; Family, \$35 (please include names); Regular (or Individual) \$25; Senior age 60 and up, \$15; Junior for ages 17 and below, \$15.

Checks can be made out to, SDERA and mailed to  
SDERA, 922 West 23rd Street, National City, CA 91950

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## Upcoming Events

Monthly meetings are normally held at 6:15  
PM on the 2nd Saturday at the  
National City Depot.

Optional no host dinner at The Barbecue Pit  
Restaurant - 920 E. Plaza Blvd, National City  
at 4:30PM about 1 block east of Highland Ave.  
and Plaza Blvd.

YOU CAN NOW FIND US ON:



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San-Diego-Electric-Railway-Association/  
241154262614173](https://www.facebook.com/pages/San-Diego-Electric-Railway-Association/241154262614173)

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### New time set for the monthly meetings

Please note the the above time change to  
the monthly meetings. Plan to arrive at the  
Depot at 6PM, to see the latest developments  
at the Depot and the Gift Shop, and to chat  
with members and friends.

#### February 13, 2016:

SDERA member John DeLalla will present  
a program of video clips and photos taken  
on, and of, the New York City Subway 2015  
Holiday Train. This is an 8 car train of R1  
to R9 cars built between 1930 and 1939 for  
the City-operated Independent (IND) system.

The train operates from the lower east side of  
Manhattan to Queens Plaza.

#### March 12, 2016:

Jim Price has recently published a book titled  
“Discovering the Ghost Railroads of Central  
Nevada.” The book provides a quick reference  
guide to the Tonopah & Goldfield, Las Vegas &  
Tonopah, and Bullfrog Goldfield Railroads.

Jim will discuss the towns of Tonopah, Goldfield,  
Beatty, and Rhyolite, NV, and the now defunct  
railroads that serviced those once booming mining  
towns, he will also provide numerous photos of  
the types of ruins that exist today.