



California Lecture

U.C. oaks

rush

junior on fence

football - Anthony

co-ed

skull & keys

track event

cadets

Stanford

Tahoe moonlight

Orland Creek

Vernon St. & Pullman

Adam's Point

Dominic's 16th St. Sunset

New Ferry building

Chinatown
"What for."

Charles observatory

~~Miners~~

27

~~Mount~~

Presidio

Park

-1-
Glimpses of California.

X

CUES.

On hearing the words: *Cal. on wheels.*

"These are some of the contrasts".

Extinguish all lights in the Hall.

Cal. on Slides.

H 1
Turn on slide

Amateur Photo. Assn.	X No. 2
260 words.?	
San Diego County	3
120 words.	
Most of these are in ruins.	4
<i>most pleasant</i> 80 words.	
The pleasantest spots ..	5
<i>50 words</i>	
<i>mexicans of the neighborhood</i> As a place of worship.....	6
<i>worship in the same</i> 50 words	
As did their Fathers.	7
60 words.	
Restoring these old buildings... ..	8
80 words.	
Long arched corridor.	9
120 words.	
Made of adobe, with tiled roofs.....	10
220 words.	
There are many herds of cattle.....	11
50 words.	
Valuable for <i>range</i> ranch purposes.....	12
100 words.	
Now wander from the pastures.....	13
70 words.	
Are now "back numbers"	14
270 words.	
Graphically depicted, looks like.....	15
270 words.	
Indigenous to California.....	16
80 words.	
These cacti are in various forms.....	17
130 words.	
Russians came down.....	18
65 words	
On the coast line.....	19
50 words.	

Written 1890

P C A P A
Members

Push the button

Erwin Luntz

After lecture - Heidi

50 words

General Sutter came by sea	No. 20
200	
the days of old, the days of gold	21
130	
old claims are still being worked	22
140	
the handling of more dirt	23
90	
thousands of tons of material daily	24
275	
we all need gold	25
90	
which the water then attacks	26
700 400	
<i>in the past ten years</i> Quartz mines are scattered	27
200	
where the lay of the mountain permits	28
50	
In small mines	29
80	
\$50,000 and never got it out	30
200	
steam driven rock breakers	31
480 850	
So the crushed ore	32
200	
still contains some gold	33
170	
<i>after</i> Just before flash lights	34
600 400	
California Academy of Sciences	35
120	
has a full corps of skilled observers	36
130	
this is virtually his monument	37
120	
cost that city 90,000	38
90	
favorable for good observations	39
150	
Cloverdale, about 100 miles from San Fran.	40
130	
Newtonian reflecting telescope	41
90	
164 negatives were made	42
350 275	

350 words

California may be called	43
80	
nothing but wheat can be seen	44
130	
on such big ranches as this	45
110	
for hundreds of miles	46
200	
Let us leave the fields	47
90	
The entrance to the harbor	48
80	
just about a mile wide	49
100	
this historic gateway	50
60	
Most of the ships are seen	51
50	
The U. S. Navy	52
50	
There is a Navy Yard	53
80	
Most of the vessels built	54
80	
perfectly flat bottoms are used	55
60	
small sails as compared with those	56
110	
San Francisco alone	57
60	
passing under the stations	58
80	
but now they run all over the hills	59
75	
yet there are some noticeable structures	60
40	
but they are nearly all gone	61
40	
as improvements progressed	62
90	
across the street	63
80	
early and wooden residences	64
65	

65 words

There is quite a difference	65
90	
many more millions to come -	66
70	
we must confine ourselves -	67
110	
Another large tract of land -	68
90	
One may go either way	69
140	
to the cliff and beach -	70
65	
gives employment to many men -	71
65	
Those on the bay carry two men -	72
65	
^{season} Suisun Bay, a continuation of San Francisco bay -	73
110	
Italian opposition in this business -	74
150	
The men are very skillful boatmen -	75
110	
one set of beds do for two gangs -	76
140	
where ever railroad work -	77
180	
occasion of the festivals, as at New Year's -	78
160	
on the opposite shore -	79
40	
backed by high hills -	80
120	
passing through a timbered region -	81
140	
350 feet in length -	82
90	
in the eastern woods -	83
150	
down this the logs are shot -	84
140	
few places can wharves be built -	85
150	
but use a reel -	86
110	
go up and down the chute also -	87
65	

	5	
	65 words	
displacing the old style	50	88
Back on the mountains	50	89
shingles, ties, etc.	120	90
\$50 for the indiscretion	50	91
many of the finest residences	200	92
and there are a number of fine buildings	50	93
by rail from San Francisco	120	94
through magnificent scenery	50	95
stock Yosemite views	100	96
temperature of 39 degrees	50	97
denuding the hillsides	120	98
paradoxically to the Orient	90	99
until pried up again in Maine		100

If the Association has interested without
tiring you its object has been accomplished.

LIGHT UP.

This set of cues for Glimpses of California was prepared for the Exhibition given in Boston, February 14, 1890; it does not differ materially from that sent from San Francisco, but it gives the Lantern Operator some idea as to how much time there is between the "cues" for changing slides, focusing, &c. In a few cases only are different cues used, from the original, and those changes were made simply to gain a little more time.

It was also found that, to handle the Lantern as it should be, it was necessary to have an extra man to attend to the lines and gas, and another to do the focusing; the operator having to be quick and sure in his movements to effect the necessary changes of slides, keep track of the cues, and do the dissolving.

GLIMPSES OF CALIFORNIA

BY THE MEMBERS OF THE PACIFIC COAST AMATEUR

PHOTOGRAPHIC ASSOCIATION.

Glimpses of California

It would no doubt be proper to preface these glimpses of California by saying that the State is some 800 miles long and some 300 and more ~~other~~ miles wide; but the fact is the dimensions are subject to change. As to width, ^{not long since} ~~only within the past few months~~ California was re-surveyed and appropriated from her neighbor, Nevada, a strip of land 200 miles long and half a mile wide, including some good fishing space on Lake Tahoe. Then, again, as to length, the people of Southern California think, very properly, that their end of the State is much bigger than it was a few years ago; and land-slides caused by the recent heavy rains in the north have spread some of the mountains over a wider surface, increasing that end. It is also found by Californians, who travel, that their State, while very large at home, ^{sometimes} decreases ~~rapidly~~ as they go away from it, and when they get on the Atlantic side of the continent, it appears very small indeed. It is therefore difficult for a Californian to be accurate on this subject, and you will have to look for correct figures in the pocket memoranda issued by the Census Bureau, and add 10 per cent. for delay in publication.

It is well also to relieve your minds on another proposition at the start, which is, that you will not be inflicted any

more than possible with such pictures as you may see in the railroad advertisements, tourist guides, or hotel and real estate circulars. You must look elsewhere for the big hotels, big trees, Yosemite, Geysers, "boom" cities and ordinary stock subjects. The State Board of Trade sends an exhibit of California products and views around the country in a special train called "California on Wheels", where all these things may be seen, and our "California on Slides" will give you only little glimpses here and there.

? We should like, however, to have you realize that in so large an area, of such diversified climate, interests and products, there are many curious phases and odd contrasts; but it would be impossible to depict all these by photography or even convey the ideas by words in a short evening. As these lines are penned, on New Year's day, the depth of winter, the great snow plows are working with gangs of hundreds of men, in 16 feet of snow on the level, to keep the railroad open by Blue Canyon and the Summit this side of Truckee; yet the writer, in Oakland, looks out of the cottage window and sees the children with their straw hats playing croquet upon the green lawn bordered with many hued roses in full bloom.

Near by,
~~Half a mile~~ away in the harbor are the white sails and silken flags of 30 or 40 canoes, with the ladies and gentlemen of the club in their flannel boating suits. In the Southern portion of California where all that is good in the climate is popularly supposed to be concentrated, the floods have washed away all the railroad bridges

and left the cities isolated; while in the foothills of the northern counties, near the great mountains, they are holding their citrus fairs, and exhibiting their piles of oranges, lemons and limes, surrounded by flowers. In some parts of the State they must build reservoirs, ditches and flumes to bring water on the land; in other parts must build levees to keep it off the land. Yet there is no telling when one will want the other's system; ~~for the other day in one of the big irrigation districts, when the time arrived to collect the irrigation tax, the man had to make his rounds in a boat and had a hard time in collecting under the circumstances.~~ In one portion, the great mountain range extends 600 or 700 miles; and in another a single valley is 450 miles long. Here the railroad runs through snow-sheds for 40 miles, at an elevation of from 6500 to 7000 feet; elsewhere the rails are continuously below the level of the sea for 60 miles. Again: here is Mt. Whitney, the highest point in any State in the Union---14,522 feet---; and 75 miles distant, in the same county, is a valley over 200 feet below sea level. Death Valley, where, from heat and absence of water, nothing can live, is in the adjoining county to the garden spot of Riverside, with its flowing wells and orange groves. Yosemite, whose wonders are supreme in American scenery, has its antithesis in the arid Colorado desert; and the highest waterfall in the world looks down on a wondrous system of dead

by Golden Gate is the entrance to Calix
though what most of the Peruvians know, it
will be used to give it first place among
our schools for the evening.

rivers, buried, with their golden contents, beneath ~~the~~ lava-flow
of pre-historic centuries. These are some of the contrasts and
some of the peculiar conditions in California.

2 ~~The Pacific Coast Amateur Photographic Association~~ is not
quite so big as its name, but

ITS ROOMS

are larger than they look on the screen, for you are only shown a
portion of them. The reception-room is not shown at all; and, as
in the dark room each member takes care of his own chemicals, etc.,
and there are no lady members to do house-cleaning, it was thought
best not to send a picture of that. The Association, however, will
be very glad to offer, and does here most heartily offer, such
facilities as it commands, to the visiting members of any of the
Eastern photographic societies, and the Boston Society in particu-
lar.

3 "First Mission"

Perhaps you will want to hear something of the original
settlement of the State. It is somewhat different from other
places, in that it gets a shaking up periodically and then settles
down to wait for the next one. The original inhabitants were
Digger Indians, by no means the "Lo type" (so to speak) described
by Cooper and of late resuscitated by Buffalo Bill. While having a
very low degree of intelligence, it must be mentioned to their

credit that they had, nevertheless, mastered that problem on which most of us more enlightened people are still engaged, viz., how to live without work.

While they still roamed at will in a rich country,abounding in fish and game, several buccaneering^{by the way} old vagabonds had occasionally discovered California and reported its wonderful resources, mostly from imagination, for they never went one inch from the ocean beach. The Spanish Franciscan friars, however, finally came wandering along into what is now San Diego county and established

(3) (#3) THE FIRST MISSION.

The dates will not be given, because it would be a job to hunt them up and they would not interest you anyhow. These missionaries came ostensibly to convert the Indians, and incidentally to get their horses and cattle and set them to work.

120 words
The Missions were founded and the men, women and children first instructed in the principles of Christianity as applied to making bricks and planting and cultivating grain, fruit and vines. They had to settle down to work, so this was called the first settlement of the State.

These Fathers established in all 21 Missions in California, none more than 30 miles from the Ocean. Most of these are in ruins today. That of

(4) SAN JUAN CAPISTRANO,

80 words
(5) also in San Diego county, shows the general features of these buildings, with their arched corridors and tiled roofs. Most of the Missions have served as centres around which towns have been built. These old fellows evidently had good judgment as to location, for they picked out the ^{most pleasant} ~~pleasantest~~ spots that could be found. The Mission at

(5) SAN GABRIEL

Slow

50 words
(6) in Los Angeles county, is now in the center of one of the richest and best populated valleys in the State. The old bells yet hang on the chains which originally held them; and the church is still used by the Mexicans of the neighborhood as a place of worship.

(6) THE SANTA BARBARA MISSION

Slow

50 words
(7) is on the elevated land back of the beautiful city of Santa Barbara. The buildings are in a fair state of preservation and are occupied by a small band of monks. Their power and influence ^{are} ~~is~~ gone; but there are still numbers of Mexicans in the region who worship in the same old halls as did their fathers.

(7) THE CARMEL MISSION,

Slow

60 words
near Monterey, is one frequently visited by tourists and has recently been restored. Within the past few years, the remains of Father Junipero Serra, the man who established the first Mission in 1769,

were disinterred at Carmel, and reburied with considerable ceremony.

(8)

It will be seen that there was a necessity for restoring these old buildings when one examines

(8) A VIEW OF THE INTERIOR

Slowly

of Carmel, taken just before the work was commenced. The walls of these buildings were made of sun-dried bricks from the stiff black soil known as adobe, so common in California. The only protection was a coat of whitewash. The curved tiles of the roof were burned by fire and laid on poles or timbers.

80
words

(9)

A characteristic of these Mission buildings is the long arched corridor, such as is shown in the view entitled

(9) WAITING FOR THE PADRE.

Slowly

It is worthy of note that the buildings ~~now in course of construction~~ at the Leland Stanford Jr. University, in San Mateo county, near San Francisco, are ~~being~~ built of stone, ~~and in~~ ^{of} one story, and on the same general plan of architecture adopted by the Mission Fathers. ~~It is also worthy of note that this University has been endowed by its founder, Senator Leland Stanford, with the sum of \$15,000,000, as a beginning.~~

120
words

(10)

In the early days all the buildings of the Mexicans were made of adobe, with tiled roofs. The old

(10) CUSTOM HOUSE AT MONTEREY

illustrates the type with correctness. The Missions were in their

220
words

there is plenty of time here

best condition in 1814, and at one time controlled 25,000 Indian ^{neophytes} neophytes. When the era of Mexican dominion and pastoral life became well established, the Missions declined in importance; and in 1835, they were secularized---that is, orders were issued that part of their herds and agricultural implements should be distributed among the neophytes and rancheros, the rest sold, and the money turned into the public treasury.

As may be imagined, this was an end to the era of the Missions. The Mexicans who settled in California were given large grants of land, which were mainly devoted to cattle. They did no work and had no anxieties. There were no lawyers, doctors, tax-gatherers^{legislatures} or newspapers. No more hospitable race ever lived, and around each large rancho gathered the Indians of the former Missions, who were well cared for. But the Indians are now all gone, leaving no language, history or monument. The Mexican people who owned the State then, now have small interests, and their day has passed like that of the Indian and Mission Father before them.

There are many

(11) HERDS OF CATTLE

Slow!

still, however, which are managed in Mexican custom. At stated periods these herds are gathered at a "rodéo", and the cattle segregated by their several owners. These scenes are now confined to

certain sections of California, most of the land being at this day too valuable for range purposes.

(12) IN BRANDING THE CATTLE

100 words with the brands of the respective owners, the ^{vaqueros} lasso the young cow or steer unceremoniously, one throwing the "riata" over the horns and another his over the hind legs. The unfortunate beast is then thrown, and ^a the red-hot brand sears the hide. The horses used are trained and will hold and guard the animal while their riders go around the corner to see what time it is. In fact, they are rather more reliable than their masters.

The days of the long-horned Mexican cattle have passed away and more gentle stock now wander from the pastures

(13) "WHEN THE COWS COME HOME." — *Panels - Slowly*

70 words In some of the coast counties, the main occupation of the people is dairying. As snow is almost unknown in California, except in the mountains, the cows can browse around out of doors all winter as well as summer, in the valley and coast counties.

Although the Indian, the Friar, the long-horned steer and the Mexican ^{vaquero} are now "back numbers", there is one

(14) OLD RESIDENT

who is still with us---the pulex irritans, better known as the flea. The one shown you is a female, but as far as ascertained, it is

270 words — go as fast as you please

just as lively and works just as hard for a living as its companion of the other sex. There are plenty of these left in California, and they are just as hard to catch as they were 40 years ago. Indeed, you sometimes think it takes about 40 years to catch one. In the old Mexican days they used to be caught wholesale by the primitive but effective method of washing a sheep white and clean and driving it into the cabin or house and leaving it to meditate and wander about a few hours. When driven out most of the fleas of the mansion were entangled in the wool. The sheep was then sacrificed on the altar of cleanliness and comfort. This system, however, is not well adapted for application in hotels or modern households. ~~Not-~~

~~withstanding the almost universal prevalence of this little pest, it may be remarked, parenthetically, that it is as improper to "scratch" in polite society in California as elsewhere. But you learn to grin and bear it yourself; and if a lady you are talking to ^{is} suddenly is uneasy in manner or assumes a meditative, far-away look, even if you suspect the cause, it isn't the thing to sympathize with her, except perhaps mentally.~~

✓ Another relic inherited by the modern Californian, not always with us, but coming occasionally, (is that) which, graphically depicted, looks like

(15)

(15)

A TANGLED SKEIN.

270 words — go in

It is always unexpected, always unwelcome, but goes as suddenly as it comes. You might not think the object on the screen was an earthquake, but it is one, drawn, too, by itself, and photographed from the original sketch. The seismograph---or earthquake-recording instrument---at the Chabot Observatory, Oakland, captured this ~~to be sent East~~ for your specific edification. Photographers will understand, that from the nature of the case, the negative is slightly jarred. If the view does not properly convey the exact idea of an earthquake, it will at least convey the idea of how an ordinary person feels while one of them is around. This particular one ~~occurred last summer, and~~ was the heaviest experienced since the memorable one of 1868, yet the actual movement of the earth is much less than is supposed. In this case the actual motion was slightly over a quarter of an inch; one moving an inch would be very disastrous. ~~The seismograph tracing in the original of this slide is amplified four times the actual movement, owing to the mechanism of the automatic recording-instrument.~~ The black portion in the center of the "knot" is the point where the pencil started and again came to rest; the wide loop showing the greatest extent of the earth's motion during the period of agitation. The old residents of California are all used to these occasional shake-ups, but while there are few fatalities connected with them, they are not

pleasant to experience.

Another thing which may interest ^{you} ~~those present~~, as indigenous to California, is the giant

(16)

(16) CACTUS TREE.

Slow

80 words
This grows out in the deserts in the extreme southern portion of the State and is a very curious specimen of plant life. The hole, which shows high up in the side, is the nest of a bird which lives in this species for want of a better place. But the bird is rather sharp, for no one wants to rob his nest in a situation where step-ladders are scarce and sharp spines plentiful.

(17)

(17) ~~(CACTUS No. 2.)~~

These cacti are in various forms and sometimes assume strange shapes. The form shown on the slide sometimes grows very large, as may be seen by comparison with the figure of the man. These plants grow in ~~very~~ arid sections where Nature enforces a Prohibition Act and permits very little moisture winter or summer. (Pause)

130 words
but don't hurry

Those who have read ^{"Two Years before the Mast"} (and who has not) the famous work of that eminent son of Massachusetts, R. H. Dana, Jr., entitled "Two Years before the Mast",—conceded by the greatest ^{of} nautical writers, W. Clarke Russell, to be the ~~best~~ best book on the sea ever written—will remember that for many years the only business on the California coast for Americans was the barter for hides and tallow. Before those days even, the Russians came down from the north and estab-

(18)

lished themselves at

(18)

FORT ROSS,

Slow!

65 words
in Sonoma county, where they built a wooden fort which is still standing. The fabled love of the Russians for tallow, probably led them to California, which at that time must have seemed a veritable paradise to those who came. The little town of Fort Ross is on a

(19)

high bluff on the coast line, and not far off is

(19)

THE RUSSIAN RIVER,

very slow

50 words
a stream passing through a country timbered with redwood, and a favorite resort for people from the city for camping, hunting and fishing in the summer.

The commercial era in California began in 1846 when the American flag was hoisted at Monterey. Before that---in 1839---

(20)

General Sutter came by sea, and established his famous

(20)

FORT AT SACRAMENTO,

200 words
and it became subsequently an important center for American influence. The old fort is still standing ~~and will soon be put in good order as it has been purchased~~ and the site set apart for a public park.

It was at the saw-mill belonging to General Sutter at Coloma, El Dorado county, ^{that} ~~where~~ Marshall found the little gold nugget which excited the world. This was, by the way, some months

before the American title to California was acknowledged by Mexico. Men came in thousands by land and sea, braving the dangers of Cape Horn, the fevers of Panama and the Indians of the plains, in the search for gold. None of them came to stay, but in this unorganized army of 20,000 or 30,000 men were the founders of the California of to-day. Some brought their wives and children, and many of these children ~~the writer of these remarks is one~~ have never been able to get out of the State since; from which you may infer that neither the pioneers nor their descendants are the rich men of the California of to-day. In "the days of old, the days of gold, the days of '49'", they were all

(21)

(21)

MINERS AND PROSPECTORS.

— not too rapid

The pick, pan and shovel were all the implements needed, for the concentrating forces of Nature had washed away the lighter materials and gathered the loose gold in the gulches, ravines, canyons, creeks, river bars and river beds. This was the era of placer or surface mining, when fortunes were gained in a day. A sample of gravel or earth from a claim was washed in a miner's pan, the lighter material floated off, and the gold caught. Only the richest of diggings could be made to pay with the pan alone. These pioneers used the pan, rocker, sluice and "long tom" in their work, but they did not dig deep. To-day these old claims are still being

130
words

(22)

worked over and over by

(22) CHINESE MINERS,

140 words
who use the old-fashioned rocker or cradle, bringing the auriferous gravel in buckets to the edge of the stream and there rocking the cradle for the gold. As they are satisfied with from 75 cents to \$1.50 per day, there are plenty of places for them to mine. White men own most of the ground, which they lease to Chinamen, and poor mining ground is now called "Chinese diggings". In some places, as at the old lava beds around Oroville, sometimes 1,000 or more Chinamen find employment.

(23) After a while it was discovered that the great red hills in the foothill and mountain counties in the central and northern part of California contained plenty of gold, though much poorer than the shallow placers, and necessitating the handling of more dirt. Then

(23) HYDRAULIC MINING

90 words
was invented. Water under heavy pressure is thrown against the bank of earth from a nozzle, or giant, as it is called, and the earth is then carried by the water into flumes and sluices, measures being taken to retain the gold in riffles and undercurrents.

In this way all labor of shoveling is avoided. Forty inch wrought iron pipes bring in the water and discharge it through nine-inch nozzles under pressure as great as 450 feet head,

(24) tearing away thousands of tons of material daily. Water is allowed to

(24) POUR OVER THE BANK

put on stream

275 words
from the ditches, also, in hydraulic mines where opportunity offers. At one time there was invested in this class of mining in California, \$100,000,000, and ^{much} ~~the bulk~~ of the gold of the State was produced by this method. ~~But it is now unlawful and the hydraulic mines are closed by the courts. The reason for this is, that the~~ immense amount of debris brought down from the mountains was filling up the navigable streams and injuring the farming country along such rivers. The debris question in California has made the valley farmers and mountain miners decidedly antagonistic to each other.

These immense streams of water under pressure soon devastate a vast tract of country, washing away whole hills and mountains. Great artificial lakes were formed in the mountain canyons to hold back the waters of the melting snows, for summer use in these mines. Great ditches and long pipe lines were also constructed and millions of dollars invested in such improvements. Yet most of these works are now idle. The suppression of this kind of mining was a practical confiscation of the property by the Government which had sold the miners the land, ^{but} ~~and~~ a Government Commission is ^{has lately solved} ~~now engaged in solving~~ the problem how to let these miners work

by compelling them to build

their claims without injury to other interests. [^] There are hundreds of square miles of this auriferous soil still untouched in California---and we all need gold.

Some of the mine-owners build

(25) DEBRIS-DAMS or SETTLING BASINS,

slow up

90 words

in which to catch the tailings of debris from which the gold has been washed, and the law now compels them to do this, if the mine is worked. In mining, the gravel is blasted first to shatter or loosen it. Sometimes 30,000 or 40,000 pounds of powder are exploded at once, shaking up 400,000 or 500,000 cubic yards of cement gravel, which the water then attacks.

*Leave this
out of my
book*

(26)

~~Here is one of the old hydraulic mines---and a famous one---, the~~

~~---(26) NORTH BLOOMFIELD,~~

*big gold bar
700 words*

~~which turned out from a single run the biggest gold bar ever made, - \$114,000. The view shows what the country looks like, when the streams of water have got through with it. Hundreds of millions of yards of earth have been washed away. The structure shown against the hillside is a hydraulic elevator, by which the gravel is washed up hill and back into the claim, so as not to go into the rivers.~~

It can be imagined how much material is moved by hydraulic mining, when it is stated that the bulk of this auriferous earth is only

13
worth three or four cents a cubic yard; yet these mines in the
hight of their prosperity yielded an annual aggregate of 15 to 16
millions of dollars. ~~In the extreme northern part of the State,~~
~~where there are no navigable streams to be injured, many of these~~
mines are still being worked. In other places they are worked by
drift process, in which, by means of tunnels, only the lowest and
richest stratum is removed and washed, the upper portion being left.

These deposits of gold-bearing gravel were laid down by
a system of pre-historic or "dead" rivers, whose channels were wid-
er and slopes steeper than the present rivers. The waters of these
old Pliocene rivers, eroding the auriferous rocks, concentrated the
gold in deposits often 300 to 400 feet wide at the bottom and sev-
eral thousand feet wide at top. Their depth now varies from a few
inches to 600 or 700 feet. During some cataclysm of Nature, vol-
canic eruptions covered these old rivers with lava and tufa hun-
dreds of feet deep, flowing in great masses directly down their
beds. Then the rivers of the present day began their courses and
in cutting across the old ones washed the gold, the early pioneers
found so abundant in the streams. These old buried rivers are now
high above the present ones. Imagine, if you can, a great mountain
ridge, extending for miles and miles. A thousand feet below the
top of this, and buried that deep under lava, is the gravelled chan-

~~nel of a Pliocene river. On each side of this great ridge, 2,000~~
feet below the bed of the old buried river and 3,000 feet below the
top of the ridge, flow the rivers of to-day. Miners run long tun-
nels into these old rivers high up on the ridges and work them by
the drift process, taking out only the richest and lowest stratum,
the upper portion being left. This bottom cement-gravel pays from
\$3. to \$10. to each mine carload; and when they breast out 50 to
150 feet wide and 2 to 8 feet deep, the channel will yield from
\$100 to \$200 per running foot. These lava-capped divides or ridges
covering the buried rivers are found in many counties of California.
The hard lava covering of the old rivers has resisted the elements
better than the softer rocks and soils, so, what were formerly the
lowest points, or rivers, are now the high mountain ridges, and
the old rivers are up in the air.

In some places the bones and teeth of elephants and other
large animals are found; and pine cones and leaves are taken out as
fresh looking and natural as those of to-day. A few hours' expos-
~~ure to the air, however, and they crumble away and shrivel to~~
~~nothingness, like Rider Haggard's "She".~~ Some of the gravel depos-
its, when in proper situations, are worked by the hydraulic pro-
cess, while others have to be worked by drifting. Only the rich-
est material is handled by the latter system, but everything is
washed in the former.

Begin

(27)

Quartz mines are scattered through the gold belt of the State from ~~one~~ end to the other, and have been worked from the early days; but in the past ten years this industry has greatly developed.

(27)

A QUARTZ LEDGE

200
words

is a vein or "fissure" of quartz, containing more or less gold;-- that is, the one you own generally has less, and that of some other fellow near by, ^{has} more. The ledge shown in the view has been stripped so that it stands ^{out} prominently. ~~out~~. The windlass is of the ordinary type used in starting a mine, but, as depth is attained, steam-machinery supersedes this. Shafts are sunk and drifts run in such a manner as to enable the miners to remove all the vein matter.

These ledges are of an average width of from two to three feet, and extend downward to an indefinite depth. When you hear men tell about quartz from these ledges worth from \$500: to \$1,000 a ton, you can put it down as "bosh", for in that case there is very little of the rock. A ledge that pays \$10 to \$15 a ton is a very good one indeed, if it is of fair size. They make ~~some~~ ^{it} pay now in California where the rock is only worth ~~a dollar or so~~ ^{\$3. or \$4.} a ton. Where the

(28)

lay of the mountain permits, these mines are opened by tunnels.

(28)

THE ENTRANCE TO A MINING TUNNEL

*Very slow
to work*

is not as carefully made as that of a railroad. The ore is brought

Very slow here - only by tunnels

out in cars, as is the waste, for a great amount of valueless material must be moved to properly work the mine. In small mines the men work at

(29) THE FACE OF THE DRIFT

slow

80 words
with hand drills to bore the holes for the blasts, as shown in this "flash light" picture. One man holds the drill, while the others strike. In these mines some portions are very rich and others poor, but there is no way of telling anything about it, unless you happen to be like the man who was sure there was money in a certain mine because he had put in \$50,000 and never got it out.

(30) Here is a little

(30) MOUNTAIN QUARTZ MILL

200 words
on the road to Yosemite, which is a type of the common mill. A mill is necessary to a mine, to grind the ore, so most of these mines are owned by companies, and the miners of the present time work for wages. Some of these men have worked in the mountains for 20 or 30 years and never have seen a railroad or a steamship in that time. They are altogether different from the type of rowdy, drunken fellows the story-writers depict, but are hard-working, steady men, with families to care for. One may go for months all over the mining regions of the State and never see a revolver, a bowie knife, or a drunken man. The Bret-Harte style of miner dis-

appeared from California 25 years ago. ~~The companies will employ no men who do not behave themselves, and allow no saloons on their properties. Another thing, too, the mining stock excitements you hear about in connection with bonanza millionaires, etc., are concerning silver mines generally, the California gold mines not being considered in any way in the stock exchanges.~~ The ore taken from the vein in the mine is brought to the mill and dumped in hoppers, from which it falls into large steam-driven rock breakers, which crush it into small pieces. It then falls into

(31) 31 THE BATTERIES or STAMPS.

full speed

480 words In the mill shown, there are 60 of these stamps running night and day, Sundays and all, and they never stop from one year's end to another. The stamps are arranged in groups of five, so that only that number need be "hung up" at a time to clean up the gold. In the mortar in which the stamps drop on the ore, quicksilver is placed, so as to catch the gold as it is freed from the rock. Water passes through the battery continually and washes the crushed ore through fine screens on to the inclined aprons or small sluices shown in the photograph. These aprons are covered with sheets of silver-plated copper, on which amalgam or quicksilver is placed so as to catch any gold which escapes from the mortars. These aprons are scraped periodically to get the amalgam. The amalgam from the

mortar and from these plates is placed in a buckskin bag and the free quicksilver squeezed out, the hard amalgam remaining, being then retorted. The heat evaporates the quicksilver and the gold is left. This is then melted into bars, sent to the mint and turned into coin, and then we all fight in our various ways to get hold of as much of it as we can.

It may, perhaps, be unnecessary to give you these details, but this is written on the supposition that people ^{generally} ~~in Boston~~ cannot be expected to know much of gold mining. In fact, there are many in California who found out they did not know anything about ^{until} it, after trying their hand a year or two. ~~And this is a good place, by the way, to state incidentally, that the selection of a proper person, a member of our Society, to write the remarks to accompany these lantern slides, was attended with some difficulty, since it was considered necessary that he should know something about Boston, or should have been there at some period, to know what Boston people would like to hear about. To such dire straits were the members reduced that the writer was finally selected, on the sole plea that he had married a Boston girl, - and quite a small one at that. If he had pleased her, he might try his hand on a Boston audience on behalf of the Association.~~

~~As the only piece of good luck he ever had in his life~~

~~was in capturing the Boston girl aforesaid, he felt obliged to accept the task.~~

~~But to come back to the gold.~~ In most of the quartz ledges, in addition to the "free gold"---that in a pure native state---they find sulphurets or pyrites of iron, also containing gold, but in such a condition that it will not amalgamate with quicksilver. So the crushed ore, after going over the batteries and aprons goes to

(32) THE CONCENTRATORS

on the floor below. These are inclined endless rubber belts, which are revolved and have also a shaking motion. They are so arranged and operated that the light "tailings" or worthless material passes away while they concentrate and collect the heavier sulphurets, as well as any stray gold or amalgam. A 60-stamp mill needs 24 of these concentrators, which run along without much attention. The sulphurets thus collected are roasted in a furnace to drive off the sulphur and are then so treated, (by chlorination process,) that the gold is dissolved and then precipitated from the solution. This is a chemical process, requiring knowledge and experience. A ton of rock may contain only two or three per cent. of sulphurets and these are often worth from hundreds to thousands of dollars per ton---but it takes time and rock to get a ton of them.

After the ore has been through the batteries, concentrators and other gold-saving appliances, it still contains some gold and is often turned into

(33) AN ARASTRA,

170 words an appliance which the Mexicans invented. This is a circular mass of stone or rock, having a vertical central shaft on which are horizontal arms. To these arms are fastened by chains or ropes great stones, which are dragged by the arms over the stone-paved surface of the central circular bed. In this instance, a horizontal water-wheel furnishes power, but with small ones, a mule or horse is often used. Water and quicksilver are mixed with the "pulp" or crushed ore. The stones move slowly around the circle, still further grinding the ore and polishing the tiny specks of gold, which the quicksilver then catches. Crushed ore worth only a dollar or so a ton pays well in these machines when water power is used. The "arastra" shown is one of a row along the river and they are all kept at work on tailings day and night, all the year around.

(34) ^{after} Just ~~before~~ flash lights were introduced, ~~a member of~~ this Association took a picture ~~of~~ was taken of

(34) MINING WITH MACHINE DRILLS,

at the end of a long tunnel, way up 7,000 feet above the sea level in the Sierras. Instead of boring the blast holes with hand drills,

600 words — full speed

Old

air is brought in under pressure through a long pipe and the drills operated by compressed air. It may interest you to know that the point where this view was taken is at the end of a tunnel 8500 feet long, and at a depth of 3000 feet from the surface overhead. This is the deepest point of gold mining in the world. The ledge still continues at this great depth, but is much poorer than at the surface. This mine, belonging to an English company, has been worked for 30 years and has produced about \$9,000,000, but as it now yields only about \$13,000 a month, it does not pay. ~~An avalanche at this mine once swept away the whole mill; and only a few weeks since, a snow slide carried away several houses, killing and burying seven women and children.~~

There are many mines, which have been worked as long as ^{-35 years-} this one, which still pay well. Many mines which have been long abandoned, have of late, with improved appliances and methods, been started up. One mine, the Stonewall Jackson, ~~belonging to the Governor of the State~~, was abandoned for some fifteen years, yet it now pays ~~him~~ a profit of \$20,000 a month and has been bonded for two and a half millions. Another, the Chipps Flat, 500 miles away from the ^{Stonewall Jackson} ~~Governor's~~, was abandoned for 20 years, yet last summer two young fellows, out of a job, took hold of it, went to work, and with only a hand-mortar and pestle pounded out over \$100,000 in

good yellow gold. California has produced a grand aggregate of ~~\$1,350,000,000.~~ ^{\$17,000,000}
~~\$1,221,260,550~~ in gold and turns out yet ~~\$16,000,000~~ a year; while
it is predicted that there will be more quartz mining in the State
20 years hence than there is to-day.

Intermission —

~~Vineyards, orchards and farms are cultivated in these
mining regions and some men can, and do, perform agricultural and
mining labor on the same place at different seasons. The other day
one of these fellows dropped a whole row of flourishing orange
trees into a cave in his bed-rock tunnel underneath his orchard; and
recently
last month a woman at Auburn, Placer county, saw the chickens pick-
ing at some bright object in her garden, which she found to be a
gold nugget worth \$57. However, it must be confessed, there are
more chickens than nuggets.~~

INTERMISSION

Some years ago there died in California a plain old man
named James Lick who, before his death, gave away in trust for the
public, a large fortune. He provided for marble statuary at the
State Capitol; statuary at the San Francisco City Hall to commemo-
rate the pioneers; ^{and} a statue to the writer of the "Address to the
American Flag;" he endowed an old ladies' home; ^{a school of Mechanic Arts;} provided for public
baths for San Francisco, ~~which are not yet finished~~, and gave half
a million dollars each to the California Pioneer Society and the

(35)

California Academy of Sciences. He gave also \$700,000 to found

(35) THE LICK OBSERVATORY

Not quite so fast

120 on Mount Hamilton, not far from San Jose, which was to have "a telescope superior to and more powerful than any yet constructed." The trustees decided on a refracting telescope and the Clarks of Cambridge made for the observatory a 36 inch object glass, and also a 33 inch lens for photographic purposes. The whole observatory ~~has been completed and~~ is controlled by the regents of the State University. It is fitted with the very best of all modern astronomical appliances and has a full corps of skilled observers.

(36)

(36) THE GREAT LICK TELESCOPE, at the time

130 the largest refractor in the world, has a steel tube 56 feet long. By comparison with the figures of the men on the platform an idea of the size may be gained. The entire weight of the mounting of this instrument is 65,000 pounds. The tube, with its attachments, weigh 8,600 pounds. The iron dome or cupola, is 75 feet 4 inches in diameter and its total height from base to zenith is 76 feet 10 inches. The dome is revolved by water engines. The floor is practically an elevator, being raised or lowered as desired to suit the position of the observer with relation to the eye-piece. Under the pier which supports this magnificent instrument lie the remains of James Lick, so that this is virtually his monument.

(37)

(37) THE EYE-END OF THE TELESCOPE

little slower

120
is fitted for use with micrometers, spectroscopes, photometers, photographic apparatus, etc., and looks like a complicated piece of mechanism. ^{Prof.} ~~Mr.~~ Keeler, who is seen observing, in the picture, says that he can never get rid of the idea that he is seated in the cab of a locomotive. The eye-pieces magnify from 180 to 4000 times; and there are three finders on this telescope. One night in the week is set aside for visitors; and a good line of stages run from San José ^(H) to Mount Hamilton, over a road that cost that city \$90,000.

(38) Here is what

(38) THE MOON

Slower

90
looks like through the Lick Telescope. This picture was taken by Prof. Burnham, ^{who was} one of the Lick astronomers and a skilled amateur photographer. The actual size of the figure on the original negative is $5 \frac{1}{8}$ inches and it bears enlargement very well. It is a revelation to look at the heavenly bodies through this telescope, for not only is it the best and most powerful in the world, but the climatic conditions are highly favorable for good observations.

(39) A SUNSET ON MOUNT HAMILTON

39
makes the Observatory look like some ancient castle. It is on the extreme summit of the mountain, the surface of which had to be removed to get level rock for the foundations of the buildings.

150 words — good time

As may be imagined the presence of this observatory and its corps of observers, has stimulated an interest in astronomy in California and now there are some 12 or 15 private observatories. The Astronomical Society of the Pacific ^{the largest of its kind in the world} has ~~175~~⁴⁰⁰ active members and issues regular publications, holding meetings alternately at San Francisco and at the Lick Observatory. In no part of the United States is there more general interest in this science than in California.

On January 1st, 1889, the day of the total solar eclipse there were 65 members of the ^{P.C.} Amateur Photographic Association assembled at Cloverdale about 100 miles from San Francisco, on an

(40) 40 ECLIPSE EXPEDITION. *little slower*

The astronomer in charge, also a member, had carefully drilled the photographers the night before in the dining-room of the hotel, using a soup-plate and an old hat to represent the heavenly bodies, so that everybody knew pretty well what to look for. There were in the field, 30 cameras in two rows, with photographers, assistants, recorders and sketchers. Some used quick and some slow plates; some plates were exposed half a second and others 40 seconds; while every precaution for careful and accurate timing had been made.

? All sized cameras were used, the largest being a telescopic camera made from a Newtonian reflecting telescope, arranged with alt-azimuth mounting.

(41) A FEW SECONDS BEFORE TOTALITY

Slow up

90. the sky was very beautiful and several photographs were made. There were a few fleecy clouds which, however, passed by, leaving a fine clear sky. The whole party had been well drilled and waited for totality to begin, when one was to count aloud, following the ticking of the electric machine connected with the chronometer.

42. The totality lasted 104 seconds, during which 164 negatives were made by ~~the~~ ^{the} members of ~~this~~ Association. The view, shows

(42) THE CORONA DURING TOTALITY. — *free speech*

350 words Each photographer had an assistant with a printed card on which to indicate the exact period when, and for how long, each negative was exposed. All the negatives were turned over to the professional astronomers of the Lick Observatory, with the individual records; so that the amateur photographers assisted materially in the scientific results of the eclipse observations. ~~They can now all talk corona glibly and each has half a dozen negatives or so, to prove that he knows something about astronomical photography.~~ ^{time and}

13. ~~Speaking of time is a reminder that the committee having in charge the collection and preparation of these lantern slides is not in fault for their non-arrival in Boston at the time set. After each man had taken three days for each slide, or 300 days in all for the 100 slides, they very naturally thought three days sufficient time to describe them all in. The chairman of the committee~~

~~lost 18 pounds in one week worrying over the delay. But the writer found that wrapping up in the whole of the scenery and industries of California in small parcels in two or three dozen pieces of paper for delivery in one package in Boston was more than a three days job; and this especially as a good many fellows changed their minds about their slides and brought in new ones every day or so, after the other ones had been written up. However, the committee got even on the writer by rejecting all his slides; and he got even on the committee by making them wait until he got good and "ready." He is willing to make this confession publicly, especially as he is like a contributor to the "conscience fund", not known from Adam.~~

James
California may be called alliteratively a land of Gold, Grain and Grapes, as it was not very long after the beginning of
43 the mining era before

(43) THE THRESHING MACHINE

Slow!

could be seen at work in the wheat fields. The ranches were at first very large indeed, but of late they have been divided up.

80 words
There are, however, still many very large wheat fields in some countries, especially in the valleys, where nothing but wheat can be
44 seen for miles and miles.

(44) THE STEAM THRESHER

full speed!

has superseded the old horse-power machine and is to be seen in the

130 *full speed*

130 harvesting season in all directions. As there are no summer rains
in California, the wheat is often left for months in the sacks un-
til sold. On one big ranch--the Glenn--the land extends for 17
130 miles along the Sacramento river and 45,000 acres are under culti-
vation. There are 150 miles of fencing on this farm and it takes
from 10,000 to 12,000 sacks of grain for seed alone, each year. It
takes from 25,000 to 30,000 sacks of barley and 5,000 to 6,000 tons
of hay to feed the work animals employed. On such big ranches as
45 this they use

(45) THE COMBINED HARVESTER

not quite so fast

110 which is a great machine hauled by 16 or 20 horses and does the
work of many implements. At one operation it cuts off the heads
of the grain, threshes it, cleans out all seeds and foreign sub-
stances, ⁴ puts the grain into sacks, which men, riding on the same
apparatus, sew up. It starts into a field of waving grain, cutting
a swath 30 feet wide and leaves a trail of well filled sacks be-
hind, which following wagons take to the warehouse. This is spec-
ially useful in the great valleys where the land is as level as a
46 billiard table for hundreds of miles.

As to (46) AS TO GRAPE VINES,

go it!

200 here is a picture of one at five years of age. The old friars
brought what is known as the native or Mission grape to California,
but now all varieties are grown. The wine interest is now ~~one~~ of

great importance to
~~the most important in~~ the State and millions of dollars are invest-
ed. In different sections where the grape is grown are wine mak-
ers who buy the grapes from the vine growers and make the wine.
Last year those who raised them only got from \$8 to \$16 per ton for
grapes and the wine men only got 12 to 15 cents a gallon for their new
wine. By the time it gets three years old and into the possession
of the consumer in bottles, it gets to be worth from \$2 to \$3 per
gallon. But in California we buy it direct from the maker for from
25 cents to \$1 a gallon according to quality and age. The wine is
so cheap it does not pay to adulterate it. At a fire at Mission
San Jose, a wine making district, ^{some} a short time since, there was no
fire department and water was scarce, so the men put the fire out
with buckets of wine, passed from big tanks near by.

47 Let us leave the fields and look at San Francisco bay for
a while.

(47) ALCATRAZ ISLAND

hold up - slow

90 lies in mid channel northwest of the city. It is a fortified mil-
itary post and in a commanding situation; though a modern man-of-
war, with her big guns, could knock it into a cocked hat in from
nine to seventeen minutes. On this island is the military prison
of the Division of the Pacific, and there is also a lighthouse and
a fog signal. The hill in the distance is Telegraph Hill, San

Francisco.

48

The entrance to the harbor is by the famous

(48)

GOLDEN GATE;

Slower

80 the view is from the outside, looking into the bay. Outside of this again is the bar, which makes the harbor bad to enter in rough weather. The shores are bold and rocky, and the long swell of the Pacific makes a constant heavy surf. Passenger car lines run along the rocky cliff on the San Francisco side, the view from which is very fine. The Golden Gate is just about a mile wide.

49

(49)

LOOKING ACROSS

slowly

100 one may see how comparatively narrow the entrance is for such a large bay. Through it, must pass all the drainage of the two great rivers of the State and their tributaries. It is found that on an ebb tide 7 times as much water passes by in a given time as in the Mississippi, past New Orleans. The currents, as may be supposed, are very swift. The old fort is on the San Francisco side; and on the opposite, or Marin' county shore, at the foot of Lime Point, is the fog-signal station. Vessels from all parts of the world sail 50 through this historic gateway,

(50)

COMING TO ANCHOR

very slow

60 in the inner harbor, and beautiful marine spectacles may be seen from the hills almost any day. The wheat export business brings

52

Battle-ship "Oregon"

And the battle-ship Oregon is one of California's successful productions which has given a splendid account of herself in the late war with Spain.

The Union Iron Works at South San Francisco, has, to date, built two other cruisers — "Charleston" & "San Francisco" — two battle-ships "Oregon" & "Wisconsin" — the monitor "Monterey", and the torpedo boat destroyer "Farragut" fastest of its class. So we have reason to be proud of our share in building up the American navy of to-day.

52_A And the Battleship "Oregon" is one of California's successful productions which ~~has given~~^{gave} a splendid account of herself in the late war with Spain.

52_B Cruiser "Olympia", flagship of Admiral Dewey in the Philippine Squadron also the work of the Union Iron Works at South San Francisco which ^{up to date has} built the two other cruisers - "Charleston" & "San Francisco" - two battleships, "Oregon" & "Wisconsin" - Monitor "Monterey" - and the torpedo boat destroyer "Farragut", fastest of its class. So we have reason to be proud of our share in building up the American Navy of today.

52_C Monitor "Monadnock"

52c Monitor "Munaduck"
built at Mare Island by
the government and is now
stationed at Manila.

No doubt, this and the
"Monterey" when their time
comes will do good work
also for they are a splendid
type of coast defense vessels.

52d Bow Wave of "Monterey"
Showing how she plunged
into the water on her trial
trip, and what rough
weather means to a
monitor.

many large ships each season after cargoes for ^{Great Britain.} ~~Liverpool.~~

The anchorage extends from a short distance inside the Gate to South San Francisco, a distance of about 10 miles. Most of the ships are seen

51 (51) AT ANCHOR *Very, very slow*
50 off the city front and between the city and Oakland. The island shown beyond the ship is Yerba Buena, or Goat Island. *So called perhaps, because it looks like a whale-*

While ship building on a comparatively small scale has long been an industry in California, it is only of late that the U.S. Navy has gone there for ships. *(See ship)*

52 (52) ~~THE CRUISER CHARLESTOWN,~~ *just move*
~~recently completed, made 18 knots an hour on her trial, and now two~~
50 ~~more cruisers are being built at the Union Iron Works, South San Francisco. These vessels are not built at the Navy Yard, but by a private firm.~~

53 *also at Mare Island where*
There is a Navy Yard, however, at which lies the old

(53) "INDEPENDENCE," *slow*
now a receiving ship. Here ~~there are two floating docks and one stone dry-dock, capable of taking the largest man-of-war.~~ The island is completely fitted with shops of all kinds, and the men-
80 of-war of the Pacific Squadron are outfitted there. *There is also a large stone dry-dock, and* The Marine Hospital, ~~is on~~ This island, which is in a pleasant situation at the head of the bay, 30 miles from San Francisco.

54

Most of the vessels built on the Pacific are

(54) COASTING SCHOONERS

of a type adapted to carry lumber, posts, ties, etc. They are fine vessels and carry very large deck-loads. They are given considerable shear and along in the waist the decks are under water when loaded. But they ply on a very rough coast and are staunch and strong. In the bay, on account of the many shallow sloughs and river entrances, vessels with perfectly flat bottoms are used.

(55) THE HAY SCOWS

Very slow!

load with hay four or five bales high on deck, and the helmsman stands on a staging high above the deck. There are nine of this kind of craft to one round-bottom one, used on the bay.

The yachts of San Francisco are of all sizes and rigs,

but they carry small sails as compared with those in the East, since

(56) A BREEZY DAY

don't hurry

is the rule. In summer the wind blows from 15 to 30 miles an hour every afternoon in mid-channel, so that light sails are seldom used. But you are sure of getting home. The old Lotus Club, whose yacht was out every Saturday for 7 months of the year, was ~~never~~ becalmed, so as not to be able to return the same day, but once in nine years' sailing. Most of the yachts are centerboard craft, owing to the shoalness of the water in the upper bays and there are

but few cutters.

~~no cutters. One, however, designed by Burgess of Boston is about ready for launching.~~

57 It would take a whole evening for views of San Francisco alone so only a few can be given, ^{and what you are about to see will give you an idea of the date of this story}

^{However, it may prove more interesting to see these principal sites of the city as it was ten years ago}
(57) THE FERRY STATION

60 at the foot of Market street is a point where the passengers from all the interior and overland trains arrive at San Francisco. Here concentrate the main cable, ^{and electric} and horse car lines. ~~These buildings~~

58 ~~are being gradually torn down to be replaced by more substantial structures on concrete foundations, the new seawall being built around the city, passing under the stations.~~

(58) LOOKING UP MARKET STREET

80 one sees the main thoroughfare of the city, into which, streets both north and south converge. It runs for several miles and upon it are the principal cable-car lines, several of which run out to Golden Gate Park and the Cliff House and ocean beach. Were it not for the cable system the many hills in the city could not well be utilized for residence purposes, but now the ^{lines} run all over the hills.

59 (59) CALIFORNIA STREET,

75- for instance, is an example of the kind of hill these cars ascend and descend. They move at a speed of from 6 to 7 miles an hour, ^{cool & slow}

~~and charge a fare of five cents.~~

The Architecture of San Francisco has been called a "bay-window style", owing to the prevalence of these convenient excrescences on the dwellings. Yet there are some noticeable structures, among which

(60) THE BANK OF CALIFORNIA,

*take a drink,
save time
somehow*

built of stone, is one. Of late the style of architecture has improved somewhat, both in business blocks and residences. The early day homes of the Mexicans were made of sun baked mud, but they are nearly all gone. Here is one of the

(61) OLD ADOBE HOUSES,

*loiter -
go snail's pace*

which is still standing,--after a fashion. It is out in the old Mexican quarter near the Mission. But most of these houses have fallen into decay or have been removed as improvements progressed.

(62) THE RESIDENCE OF MRS. HOPKINS,

the late

on Nob Hill, is rather a contrast. It cost \$1,500,000. Next door to this is the Stanford mansion which, with its pictures and contents, is ^{said to be} worth \$3,000,000. Opposite is the Flood residence costing \$3,000,000. This part of California street hill has been appropriated by the millionaire population and they have built many fine structures where a commanding view of the city and bay is given. Across the street from this are two of the

*as-
an
institute
of
art-*

(63)

CROCKER HOUSES,

Can't hurry any

80 ~~the one in the foreground having been recently completed.~~ The further one of these two cost \$1,500,000. These are at the top of the California Street Hill, on the line of the cable railroad. The early settlers did not own railroads, so their homes were not quite as pretentious. As the city grows, contrasts are presented, not only in the early and wooden residences, but in the churches.

64

(64) THE OLD MISSION CHURCH,

Slower

65 built when San Francisco was a hide station and called Yerba Buena, has been restored, but even in its changed condition it is not very imposing. The salient features of both interior and exterior have been preserved as far as possible, and the old bells still hang where originally placed. There is quite a difference between this and the

65

STARR KING

(65) ~~LAST CHURCH COMPLETED~~

slowly

66 in San Francisco, ^{So-} ~~and~~ called the "~~Starr King~~", after the famous divine of that name. It is of stone and only a portion of the structure is shown in the picture.

90 San Francisco, like many other cities, has a municipal elephant in the shape of a city hall, which has been many years building and cost some millions of dollars with many more millions to come. Here is a piece of ours,

66

(66) THE HALL OF RECORDS,

constituting

at one end of the mass of buildings ~~which will be~~ the City Hall, ~~if ever completed~~. The main center building is occupied, but the wings

70 - go slow

67A

Midwinter Fair

In the winter of 1896 the Midwinter Fair was held in Golden Gate Park — or rather the California Midwinter International Exposition — and no one who saw it will deny that it had surpassing claims to artistic beauty. The prevailing Oriental style of architecture in conjunction with a luxuriance of tree & flower made it brilliantly picturesque and suggestive of our semi-tropic midwinter climate.

are only partly built.

67 San Francisco is quite proud of the

(67) GOLDEN GATE PARK

easy-slow

of over 1,000 acres, which lies between the city and the ocean beach. It is to be regretted that we must confine ourselves to a single view, that of the children's playground and the house built for their pleasure. This part of the grounds is retained exclusively for the use of the children and all sorts of games and amusements are provided for them. ~~The late Senator Sharon gave the money for the building where refreshments are served.~~ There are fine drives and walks in the park and a band plays there at stated periods. The climate permits the culture of many rare and beautiful plants, shrubs and trees, not to be seen collectively in other parts of the United States.

In the winter of 1896
mid winter fair

(67A)

68 Another large tract of land for public uses is the U. S.

Reservation of

(68) THE PRESIDIO,

90 words
must go slow

one of the entrances to which is shown on the screen. This tract comprises 1500 acres and fronts the ocean and bay shore for four miles. It slopes to the edge of the bay near the Golden Gate and here are the head-quarters of the Military Division of the Pacific, with barracks, storehouses, officer's quarters, etc. The Presidio has been

90 words must go slow

laid out in roads and walks and much labor has been expended in beautifying the surroundings. One may go either, by way of the Presidio or the Golden Gate ^{Park} to

69

(69)

THE CLIFF HOUSE,

fair time

a resort in front of which are the famous seal rocks, one of the few places on the coast where the killing of seals has been prohibited. Back of this are the Sutro Heights, where the owner has

69A
140

laid out fine grounds. ^{This old Cliff House was burned in 1895 and a new one} ~~This gentleman is expending enormous sums and more pretentious erected on the site.~~

~~in the purchase of books, from all over the world, and will establish at this spot one of the largest public libraries in the country.~~

The Cliff House and surroundings are visited constantly not only by tourists but by citizens of San Francisco, who enjoy the fresh sea breezes and a walk on the smooth ocean beach. ~~A number~~

70

~~of car lines have been built to the Cliff and beach.~~ A view of

(70) THE HAY WHARVES

go-slow!

only
65
words

shows that the water front of San Francisco is much like that of any other maritime city. In the distance is one of the Arctic whaling fleet, an old-time bark, of which there are many still in commission, though the steam-whalers are fast replacing them, being found more safe and profitable.

71

Aside from whaling the fishing industry of San Francisco gives employment to many men.

(71) THE ITALIAN FISHING SMACK

Read slow

65
words
72
has almost an entire monopoly of the business; the craft of this type being seen in all weathers on the bay, and on the ocean along the coast. The boats are picturesque, all carrying the lateen sail. They are keel-boats, very seaworthy and fast. Every one of them looks precisely like every other one, the only difference being that of size. Those on the bay carry two men to

(72)

HAUL THE NETS,

— very slow

65
73
but the big ones for outside ocean work have ^{larger} ~~bigger~~ crews. A slightly modified form of the same boat is used by the salmon-fishers of the Sacramento river, hundreds of boats being employed in this industry. The men live with their families in house boats at the mouths of the ^{new} sloughs or creeks emptying into Suisun bay, a continuation of San Francisco ^{and San Pablo.} bays.

(73)

THE ITALIAN FISHERMAN

— don't go too fast

110
is seen in numbers at Fisherman's wharf, a place specially arranged for him and his boats on the San Francisco city front. Here the boats are moored side by side in rows, and there are conveniences for hauling them out and for drying and repairing the nets. Lots of these fellows have been in the country for years and years, and cannot speak a word of English. In a yachting cruise up river last summer, several salmon and sturgeon-fishing camps were passed, where

out of 30 or 40 men not one could be found to tell even the name of a stream or how far it was to anywhere. But the Chinaman runs the Italian opposition in this business, as he does others in other branches.

74
(74)

CHINESE JUNKS

fair time

are very common on the bay and rivers. The men are a hardy set, who establish small colonies along the shore of the bay, where ~~they dry~~ the shrimps, sharks-fins and fish ^{they dry} they catch, for shipment to China. The boats are roughly built, have no keels or center-boards and are fitted with huge lattice-work rudders, yet their sails are so made that the boats sail well and get through bad weather in an astonishing way. You can see what a patch-work this fellow's sail is, yet he has only commenced mending it. The anchor is stuck over the bow and he has a load of rice, carrying it to a fishing camp. Their sails with the bamboo battens are very quickly reefed, so these boats go out in all weathers, using one or more sections of the sail according to the strength of the wind. The men are very skillful boatmen.

150
75

You are, possibly, more familiar with the Chinaman as a

(75)

WASHING MACHINE,

a character which he naturally assumes until he gets a better job. The Chinese washman is a familiar figure all over California, in

110 words - go a little slower

big cities and little towns. He can do his work in small space, and when he has a chance, rigs his drying lines on top of the house. In their wash houses they work night and day, in two crews, one lot being at work ~~all the time~~, while the other sleeps. This is one of their methods of economy, as one set of implements and one set of beds do for two gangs.

76

(76)

THE CHINESE PEDDLER

fair time

is another familiar figure all over the State. They use the pole and baskets of their country and can carry in this way loads of very great weight. In the cities they peddle vegetables, fruit and fish from door to door. The only part of our costume they adopt are the boots and hats. They prefer the heaviest boots they can get for their money, and wear only one kind of a hat, a soft black felt with a straight brim. One of the early-day Chinamen bought one of this description and the rest of the race who have come since have stuck to the same style. These people perform the bulk of the work on the farms, vineyards and orchards of California, and also on the railroads. Wherever railroad work is going on, one may see

140

words

77

(77)

THEIR CAMPS,

plenty of time

for they always live in colonies, large or small, and have their own cooks. They have their own Chinese boss and work like machines

180 words

steadily, but cannot be hurried. On the railroad lines they live in tents and rough huts. They are very clean about their persons, clothes and bedding, but oblivious to surrounding filth which accumulates wherever they live.

There is in San Francisco a Chinese population of between 25,000 and 30,000, all crowded together in what is known as Chinatown in the center of the city. They occupy a comparatively small space. There are their dwellings, stores, markets, restaurants, temples, theatres and opium and gambling-dens. They gradually crowd the whites out of this neighborhood, as they do out of the various occupations they enter. Tourists all seem to desire to visit Chinatown, but the Californians seldom go there unless on the occasion of the festivals, as at New Year's, or when they have

78
(78)

THE PROCESSION OF THE DRAGON.

slow

At that time, dressed in gorgeous costumes, they carry an immense dragon made of silk, bamboo and paper, through the streets. This dragon is 300 or 400 feet long with a most marvelously constructed and elaborate head. This is one of the times when Chinatown looks

160 words
picturesque even to a Californian. (78) Such street scenes as this also prove interesting, especially to lovers of cunning youngsters that whatever opinions Californians may have on the subject of

Chinese immigration, population and labor, they are based on an experience of years, which people in other parts of the country lack.

If the whole outfit of Chinatown, people, buildings and all could be shipped to some philanthropic city in the Eastern states, there would be great rejoicing in San Francisco and the whole of California, and a handsome bonus would be paid for the privilege.

On the opposite shore of the Golden Gate from San Francisco, reached by

(79)

FERRY BOAT,

(Drink)
+ go very slow

is Marin county, where among others are the suburban towns of San Rafael and Sausalito. The shores are bold and rocky backed by high hills.

(80)

SAUSALITO

don't hurry

is one of the most picturesque little places in the State, and is nearly made up of residences occupied by people in business in San Francisco. It is distinguished by being considered the local "English Colony"; and ~~also by having among its population a large number of skillful amateur photographers.~~ It is a great place for yachting and boating, ^{two of the large} ~~the principal~~ yacht clubs of the bay having their rendezvous there.

The country around Sausalito is quite hilly, and from here the railroad runs north to the Russian river and the redwood country. The route is quite a picturesque one, passing through a timbered region at the upper portion. Here is

(81)

A LITTLE PATCH

fair time

photographed in one of the gulches on the route, which will give you

an idea of the kind of vegetation to be found in the undergrowth. It is a fine section for botanizing for any one fond of that exciting science.

Speaking of the timber regions is a reminder that among the big things of California, are her trees, ---not the show trees of the Mariposa or Calaveras groves of which you have seen pictures, -- but the every-day redwoods of Sonoma, Mendocino and Humboldt counties, which are cut for lumber. One of these trees was felled the other day which scaled, after being cut into logs, 65,500 feet. They are from six to eighteen feet in diameter, --not circumference-- and are from 200 to 350 feet in length. Here are men

82 (82) FELLING A TEN FOOT TREE. *slow*

90 A staging is built up to get away from the thick roots, and two men chop in about one-third of the way on one side and then saw on the opposite side with a cross-cut saw, wedging up on that side, as they saw, until the tree falls. The small trees are left. With medium sized average trees, one acre of these redwoods will equal nearly 17 acres ^{in the Eastern woods} allowed to timber, ~~as~~ utilized for railroad ties for instance, ~~in the Eastern woods.~~

83 The logs are "snaked" *over*

(83) HAULED BY OXEN *fair time*

over "skid roads" to the "landing", where they are put on the train

150 words

and transported to the mill. To ease the pull on the skids a "bucket-man" goes ahead and splashes water on the logs in the road. At high water seasons, the logs are floated down the streams, but most of the big companies now have logging trains in their woods. The largest logs, say 12 to 15 feet in diameter, are split by giant powder before being handled or loaded. Double circular saws, one above and one below, are used in the mills to cut these logs into boards; ~~and~~ ^{but} in ~~some~~ ^{most} modern mills, band saws are used. When the logs are carried by train they are taken to tide-water, where a deep slough or river is dammed above the mill. A landing is built of heavy logs inclined to the water and down this the logs are shot to the boom.

(84) A DIVING LOG

fair time

starts down in a column of smoke and dust and finishes in a column of water and spray. By the time it strikes the water, it is going at a tremendous speed, and a piece of wet, heavy redwood, say 10 feet thick, and 16 or 20 feet long, makes quite a commotion. The average run of saw logs is 6 to 8 feet in diameter and handling these and larger ones requires very different manipulation from the usual logs of the Atlantic forests.

The coast line of California extends about ^{800 miles} ~~as far as is~~ ~~the distance from Cape Cod to Charleston, S. C.~~; yet in this dis-

85 tance there are only two really good harbors,--San Diego and San Francisco. The timber ports are nearly all open roadsteads and in very few places can wharves be built. They use

(85) CHUTE LANDINGS,

150 buildings, with wire rope and trestle, a great skeleton structure out over the rocks to a point where a schooner can be moored. The outer end can be raised or lowered as desired. The lumber, ties, posts, shingles, &c., from the mills, are slid down the long chute, there being ^a ~~no~~ brake or clapper at the lower end to check the momentum. The lumber-chute shown on the screen is 700 feet long.

This particular landing was called "Hardscratch", it being very hard to get to and away from; but is now called Signal Port, because the vessel lies off and on until they signal from shore that the water is smooth enough for work. Nearly all lumber ports have one or more of these chutes. Some chutes blow down every year in winter, while others last a long time.

86 In some places they cannot even have the slide chute, but use a reel, or, as the woodman calls it,

(86) A TRAPEZE LANDING,

slow up a little

110 words where the schooner is moored off a point and a wire rope from the bluff is led between her masts to a mooring beyond. Wood, ties, posts, etc., are hung in slings and lowered to the deck by means

87 of this rope. The schooner lies with her sails loose, ready to start instantly if the off-shore seas come in heavily or the wind gets too fresh. Most of the rivers along the coast have bars at their mouths so vessels cannot enter, and for this reason this chute system of loading is adopted. Passengers and baggage go up and down the chute also, where there are no wharves, a sled being used in this case.

(87) THE LUMBER SCHOONERS

Go slow

65 are fine, staunch vessels, built to carry large deck loads, but owing to the nature of the landings they have to go to, the business is rather risky. Of late steam schooners are multiplying in number and displacing the old style of lumber-drogher.

(88) THE COAST SCENERY

Go slow, very

50 south of San Francisco is not so bold and rugged as it is north and the hills are lower, but there are very few harbors. A characteristic view is given on the slide showing a couple of the arches that are so frequently seen.

89 Back on the mountains where logs are smaller than on the coast, the

(89) LOGS ARE HAULED

Go very slow

50 on wagons to the mill. This is the sugar pine country, where there are no redwoods and where there are many small mills. The logs are "snaked" to the roads where the teams haul them to the mills. They

90 are cut up into posts, shingles, ties, etc., and hauled over

(90) THE DUSTY ROAD. *don't hurry*

to the lumber yards in the small towns. Great quantities of red-wood lumber are now exported all over the world, the butt logs, roots, etc., making fine ornamental wood for interior decoration purposes.

FERRY BOAT

120 Across the bay from San Francisco is the city of Oakland, a place of about 65,000 inhabitants. It is the ^{third} ~~second~~ city on the coast in point of population and is mainly known as a place where many San Francisco people sleep; ~~where the steam railroads are al-~~
~~lowed to change no fares within the city limits;~~ and where they have a police judge who recently got ^{intigicated} ~~drunk~~ and fined himself \$50 for the indiscretion. In the center of the city is

91 (91) LAKE MERRITT, *Slow-very*

50 a large salt water lake of 150 acres, ~~it~~ formed by damming an arm of the bay. It is used as a water park and many canoes and boats are

91A kept there. On one side of the lake are many of the finest resi-
Some quite picturesque and home like. This is the residence of
92 dences. In this city is the Chabot Observatory, the only astronom-
Geo. D. Greenwood on Jackson Street.

200 words ical institution in the country devoted exclusively to the instruc-
tion of scholars and the public. One night each week is for the pupils of the High School, one night for the pupils of the grammar schools, and the remaining evenings of the week, parties of the citizens may use it on obtaining cards from the Superintendent of

Oakland is known as the
"Athens of the Pacific" by
reason of its numerous and
superior educational institutions,
and not far off, in a delightful
93) situation overlooking the
Bay is the State

"University of California"

founded in 1866 and now comprising
thirteen colleges. The dawn of
the new century presages mighty
events in which this university
is destined to participate. The
newest of nations has been
summoned to mingle in the
affairs of the oldest, and
California, upon the Pacific shore,
suddenly confronts the Orient.
At this crisis, a noble patroness
Mrs. Phoebe A. Hearst has enabled
the University to plan a
monumental group of buildings
consistent with its growing
importance and dignity, the present
architecture being hap-hazard and
unsatisfactory.

Public Schools. An astronomer paid by the city is always in attendance. There is a fine eight-inch refracting telescope made by the Clarks, a large transit, and all the usual instruments of an observatory. Meteorological records are kept; and the exact time is given and rung out from the City Hall bell at 12 noon, and 9 P.M., at which hour---the curfew---all (92) small boys and girls must be off the streets or be liable to arrest. This institution was given to

the public school children of Oakland by a local philanthropist whose name it bears, ^{but in 1894 was enlarged and remodeled taking on the aspect shown in this recent picture.}

(92B) An Oakland Smithy — pause — see notes —
Oakland is known as the "Athens of the Pacific," by reason of its numerous and superior educational institutions, ^{and} Not far off in a delightful situation overlooking the bay, is Berkeley, where the "State ⁽⁹³⁾ University" ^{located} is situated. Here is one of the State Agricultural stations, and there are a number of fine buildings. The

(93) — ART GALLERY — *Slow up*
~~will give you a general idea of the character of these structures.~~

50 A short distance from this is the State Asylum for the deaf and dumb and also for the blind. *Slow*

94 Sacramento, the capital city of California, is on the river of that name, about 90 miles by rail from San Francisco. From the dome of the

(94) STATE CAPITOL *easier than 120 words*
a fine view of the Sacramento valley is obtained, the whole country

thereabouts being on a dead level. A view of the distant Sierras, the main mountain range, is also seen. It is to be regretted that the time limit of these "Glimpses of California" will not admit the presentation of a number of views of mountain scenery, where there is so much of interest, and that we must confine ourselves to very few.

The railroad going East, climbs the Sierras and crosses them at an elevation of about 7000 feet. Going north to Oregon, the road passes the base of Mount Shasta through magnificent scenery. This is a little sketch

(95) WAITING FOR THE TRAIN

at ~~and~~ one of the stations on the latter route. At this station a young girl is ticket and freight agent, express agent and telegraph operator and there are only two houses there. The place is a type of an ordinary mountain station.

We promised to spare you any stock Yosemite views, but here is a

(96) LITTLE CABIN

in the valley, just to prove that some of the amateurs have been there. In fact, they rather prefer some "little bit" like this to trying to put a seven-mile landscape on a 7 inch plate.

It would be pleasant to show you some of the beauties of

(96)

However, so attractive
are "The Three Brothers" and

(96A) "The Three Brothers" and
surroundings that one cannot
not feel pleased to see it on
the screen here, also

(96B) "The North Dome" from
the Merced river.

It would be pleasant, etc.

Lake Tahoe, a fresh water lake 25 miles long and from 12 to 14 wide, at an elevation of 6247 feet above the sea level. It has a depth of 1645 feet and a bottom temperature of 39 degrees. Here is one sketch,

97
(97)

THE CASCADE

Very Slow

that falls into Emerald bay, on the west shore of the lake. But a whole evening could be spent with the beauties of Lake Tahoe alone.

50 A river flowing from ^{the} ~~this~~ lake furnishes power for a number of mills which are sawing the picturesque scenery into boards and saw-dust by denuding the hillsides of their trees.

98
A view of the

(98)

TRUCKEE RIVER RAPIDS

Easy

120 will give you an idea of the general aspect of the region and how heavily it is timbered. The distance of Lake Tahoe from the railroad is 16 miles, the road being along the bank of this beautiful river. The waters are filled with trout, as are those of the lake. That ~~is~~, they are said to be, but at the time these pictures were taken, our party paid \$1.50 an hour for a rickety old boat and didn't get a bite in two days. However, the fish bit well two days before, and would two days hence, so we were informed by the modest and truthful boatman.

As you leave California, going westward,---and paradoxi-

99

cally to the Orient---you must pass through

(99)

THE GOLDEN GATE,

slow & easy

which from the bay looking westward is well depicted in this view.

The broad expanse of water is the main channel of San Francisco bay, the anchorage being in front of the city, while this portion is on the side. The high land is on the Marin county shore, the fort being on the low ground opposite.

California is sometimes called the sunset land, since when the sun passes over the western hills and dips into the Pacific, it leaves the United States until picked up again in Maine. A

(100)

SUNSET OVER THE SANTA CLARA VALLEY,

as observed from Mount Hamilton, is something to remember, especially in summer when the whole valley beneath is a vast sea of fog, looking like the agitated waves of the ocean.

~~The members of the Pacific Coast Amateur Photographic~~
It has been

~~Association have endeavored, for this once at least, not to look at~~

California

~~their State through a wide angle lens with no stops, but simply to~~

give you some sketchy glimpses, ~~with the hope, perhaps, that some~~

~~may want to see more, personally. If the association has interested,~~

~~without tiring you, its object has been accomplished.~~
and if these have interested, the object of this collection of amateur photographs

Thanks to audience
THE END.

LIST OF SLIDES.

		Slide by	Negative by
X 1	Title of Lecture	Woods	Woods
2	Rooms of P. C. A. P. A.	Woods	Treat
3	San Diego Mission	Heuer	Heuer
4	San Juan Capistrano	Woods	Requa
5	San Gabriel Mission	Tasheira	Tasheira
6	Santa Barbara Mission	"	"
7	Carmel Mission, Monterey	"	"
8	do (interior)	"	"
9	Waiting for the Padre	"	"
10	Old Custom House, Monterey.	Reed	Reed
11	A Rodeo	Lowden	Treadwell
12	Branding a Steer	Woods	Requa
13	When the cows come home	White	White
14	An old inhabitant (flea)	Runyon	Runyon
X 15	A California Earthquake	Lowden ✓	Earthquake
16	Caetus, Southern California	Oliver	Oliver
17	do od	"	
X 18	Fort Ross	White	White
19	Russian River	Goddard	Goddard
20	Sutters Fort	Woods	Partridge
21	Panning out Gold	Heuer ~	Heuer
22	Chinaman rocking out gold	Woods	Partridge
23	Hydraulic Mining	Tasheira	Tasheira
24	do do Trinity Co.	Heuer	Heuer
X 25	Debris Dam	"	"
26	Hydraulic Elevator	" 5	"
27	Starting a mine	Oliver	Oliver
28	Entrance to Tunnel	Reed ~	Dornin

+29	Face of the drift	Lowden 3	Dornin
30	Josephine Gold Mine	Oliver	Oliver
31	Interior of Gold Mill	" "	" "
32	Ore Concentrators	" "	" "
+ 33	An Arastra 35 ft dia.	" "	" "
+ 34	Machine Drilling	" "	" "
35	Lick Observatory, Gen'l View	" "	" "
36	The big Telescope	" "	" "
37	Eye end of Telescope	Burnham	Burnham
38	The moon seen thro' telescope	Oliver	Burnham
39	Sunset on Mount Hamilton	Burnham	Burnham
+40	Eelipse Expedition Jan 1 89	Oliver	Runyon
+ 41	Before Totality	" "	Oliver
42	The Corona	" "	" "
+ 43	Threshing by horse power	Woods	Tasheira
44	Threshing by steam	Tasheira	" "
45	A Combined Harvester	Woods	Partridge
46	A Five year old Vine	Oliver	Oliver
+ 47	The Anchorage, Aleatraz to S.F.	Reed 3	Reed
48	Golden Gate, looking inwards.	Johnson	Johnson
49	Looking across the Golden Gate	Lowden +	Lowden
50	Coming to Anchor	Reed +	Reed
51	At Anchor	Woods	Woods
52	U.S.S. "Charleston"	Runyon ✓	Runyon
53	Receiving ship "Independence"	Reed 5	Reed
54	"Bill the Butcher"	Lowden 6	Lowden
55	Hay Seow	Runyon 3	Runyon
+ 56	"A Breezy Day"	Lowden 6	Lowden
+ 57	Ferry Landing, Market st	Reed 6	Reed

58	Market st looking west	Reed 7	McConnell
59	California st and cable car	Runyon 4	Runyon
60	Bank of California	Lowden 9	Lowden
61	Old Adobe on 16th street	Brooks	Brooks
+ 62	Mrs Hopkins House	Lowden 8	Dornin
63	The Crocker Houses	" 9	"
+ 64	Mission Dolores S F	Woods	Woods
+ 65	Starr King Church	Palache	Palache
+ 66	Hall of Records	Deane	Deane
+ 67	Childrens Playground	Reed 8	Cormac
68	Entrance to Presidio	Reed 9	Reed
69	Cliff House & Seal Rocks	Oliver	Oliver
+ 70	Hay Wharves foot of 3rd St	Tasheira	Tasheira
+ 71	Italian Fishing boat	Reed 10	Reed
72	Hauling Herring Seine	Tasheira	Tasheira
73	Italian Fisherman	"	"
74	Chinese Junk	Lowden 10	Lowden
75	Chinese Laundrymen	Reed 11	McConnell
76	Chinese Vegetable Peddler	Woods	Woods
+ 77	Camp of Chinese Navvies	"	"
78	Festival of the Dragon	Oliver	Oliver
+ 79	Sausalito Ferry boat	"	"
+ 80	Sausalito	Reed 11	Reed
+ 81	Ferns(foot of Tamalpais)	Woods	Woods
82	Felling a big Tree	Oliver	Oliver
83	Hauling Logs	Lowden "	Lowden
84	A Dusty Road	Lowden 12	"
84	Diving Log	Oliver	Oliver
85	85 Lumber Chute	Lowden	Lowden
+ 86	A Reel or trapeze Chute	" 14	"

+ 87	Schooner Gualala	Lowden	Lowden
+ 88	Rocks near Santa Cruz	Oliver	Oliver
89	Hauling Logs with horses	Lowden	Lowden
90	A Dusty Road	" "	" "
+ 91	Canoeing on Lake Merritt	Oliver	Oliver
+ 92	Chabot University	" "	" "
+ 93	Art Gallery Univ: of California	" "	" "
94	State Capitol, Sacramento	Woods	Partridge
95	Waiting for the Train	Lowden	Lowden
+ 96	Lost Cabin, Yosemite	Runyon S	Runyon
+ 97	Cascades Lake Tahoe	Oliver	Oliver
+ 98	Truckee River Rapids	" "	" "
99	The Golden Gate	Reed B	Reed
100	Sunset above the Santa Clara Valley	Burnham	Burnham

Summary

Slides on Carbutt Plates	-----	54	
" " "Eastman Plates	-----	46	<u>100</u>
Slides developed with Oxalate & Iron	-----	60	
" " " Hydrokinon	-----	28	
" " " Eikonogen	-----	8	
" " " Pyro	-----	4	<u>100</u>



(143)

San Francisco, _____ 18__

is considerable ore of fairly high grade in sight, which could be mined and smelted at a profit if sufficient sulphides are found in the mine to help flux them in smelting.

4- The quantity of ore at present in sight I estimate roughly as follows:-

Carbonate and silicate ores in surface workings	50,000 tons
" " " " on dumps	25,000 "
Sulphide ores in mine	2,500 "
Total ore in sight	77,500 "

Repair

20

91 B

91 D

91 C

55

69 C

Look at pages # 13-14-33-
34-48-
of interest for
Album

NOTE FOR THE LECTURER.

The headings in big letters are part of the text, and to be read as part of the lecture, except in the case of the title in brackets on page 12, viz. (CACTUS No.2) where the words are merely a reference to the slide, and are not to be read.

Should it be desired to make an intermission in the lecture, it is suggested that the pause should follow the 34th slide. The first portion of the lecture ending with the words "more chickens than nuggets".....

The underlined words are the cue words, which are furnished to the lanternist, who will change the slides by them and the lecturer need not pay any attention to them or to the screen.

The lecture was delivered in public at Pioneer Hall on 15th Jan., 1890, in San Francisco and occupied exactly one hour and twenty-six minutes, without any intermission.

Arrangements for this lecture will be made by Mr.W.Garrison Reed of the Boston Camera Club.

Any communications in regard to the lecture, any press notices or other matter of interest, should be sent to

G. Knight White, Secretary,
Pacific Coast Amateur Photographic Association,
89 Flood Building, San Francisco, Cal.

CUE WORDS.

- 1 Title
- 2 Photographic Association
- 3 San Diego County
- 4 Most of these are in ruins
- 5 The pleasantest spots
- 6 Mexicans of the neighborhood
- 7 Worship in the same old halls
- 8 Restoring these old buildings
- 9 Long arched corridor
- 10 Made of adobe
- 11 Many herds of cattle
- 12 Valuable for range purposes
- 13 Gentle stock now wander
- 14 Are now back numbers
- 15 Which graphically depicted
- 16 Indigenous to California
- 17 Assumes strange shapes
- 18 Russians came down
- 18 On the coast line
- 20 General Sutter came by sea
- 21 The days of gold
- 22 Old claims are still being
- 23 Necessitating the handling
- 24 Thousands of tons
- 25 We all need the gold
- 26 Here is one of the
- 27 In the past ten years
- 28 Where the lay of the mountain
- 29 In small mines the men work
- 30 \$50,000 and never got it out
- 31 Steam driven rock breakers
- 32 So the crushed ore
- 33 Still contains some gold
- 34 Before flash lights were
- 35 Academy of Science
- 36 Full corps of skilled
- 37 Virtually his monument
- 38 Cost that city \$90,000
- 39 Sunset on Mt. Hamilton
- 40 Cloverdale about 100 miles
- 41 Newtonian reflecting telescope
- 42 164 negatives
- 43 Beginning of the mining era
- 44 Nothing but wheat
- 45 On such big ranches
- 46 Billiard table
- 47 Buckets of wine
- 48 Telegraph Hill
- 49 The Golden Gate is
- 50 Historic gateway
- 51 Most of the ships
- 52 U. S. Navy
- 53 There is a Navy Yard
- 54 Most of the vessels built
- 55 Perfectly flat bottoms
- 56 Small sails as compared
- 57 San Francisco alone
- 58 New sea wall being built
- 59 Residence purposes
- 60 Noticeable structures
- 61 Sun baked mud, but they
- 62 As improvements progressed
- 63 Across the street
- 64 The modern residences
- 65 Were originally placed
- 66 More millions to come
- 67 Must confine ourselves
- 68 Another large tract
- 69 One may go either
- 70 Cliff and beach
- 71 Gives employment to many
- 72 Those on the bay carry
- 73 Into Suisun Bay
- 74 Italian opposition
- 75 Skillful boatmen
- 76 One set of beds
- 77 Wherever railroad work
- 78 Festivals at New Years
- 79 On the opposite shore
- 80 Backed by high hills
- 81 Through a timbered region
- 82 350 feet in length
- 83 Eastern woods the logs are
- 84 Into this logs are shot
- 85 Few places can wharves
- 86 But use a reel
- 87 Up and down the chute
- 88 Displacing the old style
- 89 Back on the mountains
- 90 Shingles, tiles, etc.
- 91 \$50 for the indiscretion
- 92 Many of the finest residences
- 93 Number of fine buildings
- 94 90 miles by rail
- 95 Through magnificent scenery
- 96 Stock Yosemite views
- 97 Temperature of 39 degrees
- 98 Denuding the hill-side
- 99 Paradoxically to the Orient
- 100 Leaves the U. S.

NOTE FOR THE LANTERNIST.

Raise the lid of slide box to a right angle and remove lid by pressing to the right.

As slides are changed very rapidly in some cases the Lanternist should have an assistant to follow the cue words.

The following slides remain on the screen a long time: Nos. 1, 2, 15, 24, 26, 34 and 42.

Nos. 5 to 9 are quick changes, also 16, 18, 19 and 20.

All the changes after 50 are fairly rapid, but there is in all cases plenty of time to dissolve after the cue words are read.

ITINERARY OF "GLIMPSES OF CALIFORNIA."

SHIPPER.		RECEIVER.	DATE OF SHIPMENT.	DATE OF RECEIPT.
Boston	should ship to	Washington	Oct. 1, '90.	<i>Sept 29. 1890.</i>
Washington	"	Pottsville	Oct. 15, '90.	<i>Oct 17- 1890.</i>
Pottsville	"	Rochester	Oct. 30, '90.	<i>Nov 3 1890.</i>
Rochester	"	Peekskill	Nov. 15, '90.	<i>Nov 20 -1890.</i>
Peekskill	"	Bridgeton	Nov. 30, '90.	<i>Dec. 1st 1890</i>
Bridgeton	"	Newark	Dec. 15, '90.	<i>Dec 16th 1890.</i>
Newark	"	Medford	Dec. 31, '90.	<i>January 2^d 1891</i>
Medford	"	Syracuse	Jan. 15, '91.	
Syracuse	"	St. Louis	Jan. 31, '91.	<i>Feb. 12, 1891.</i>
St. Louis	"	Middleville	Feb. 15, '91.	<i>Feb 26/91 - P.M.</i>
Middleville	"	<i>Brooklyn N.Y</i>	March 1, '91.	<i>mch 10 /91</i>
<i>Brooklyn</i>	"	Providence	March 15, '91.	<i>mch. 23/91 - P.M.</i>
Providence	"	<i>Hartford</i>	March 31, '91.	<i>apr 2^d 91</i>
	"		April 15, '91.	
	"		April 30, '91.	
	"		May 15, '91.	
	"	Boston	June 1, '91.	

