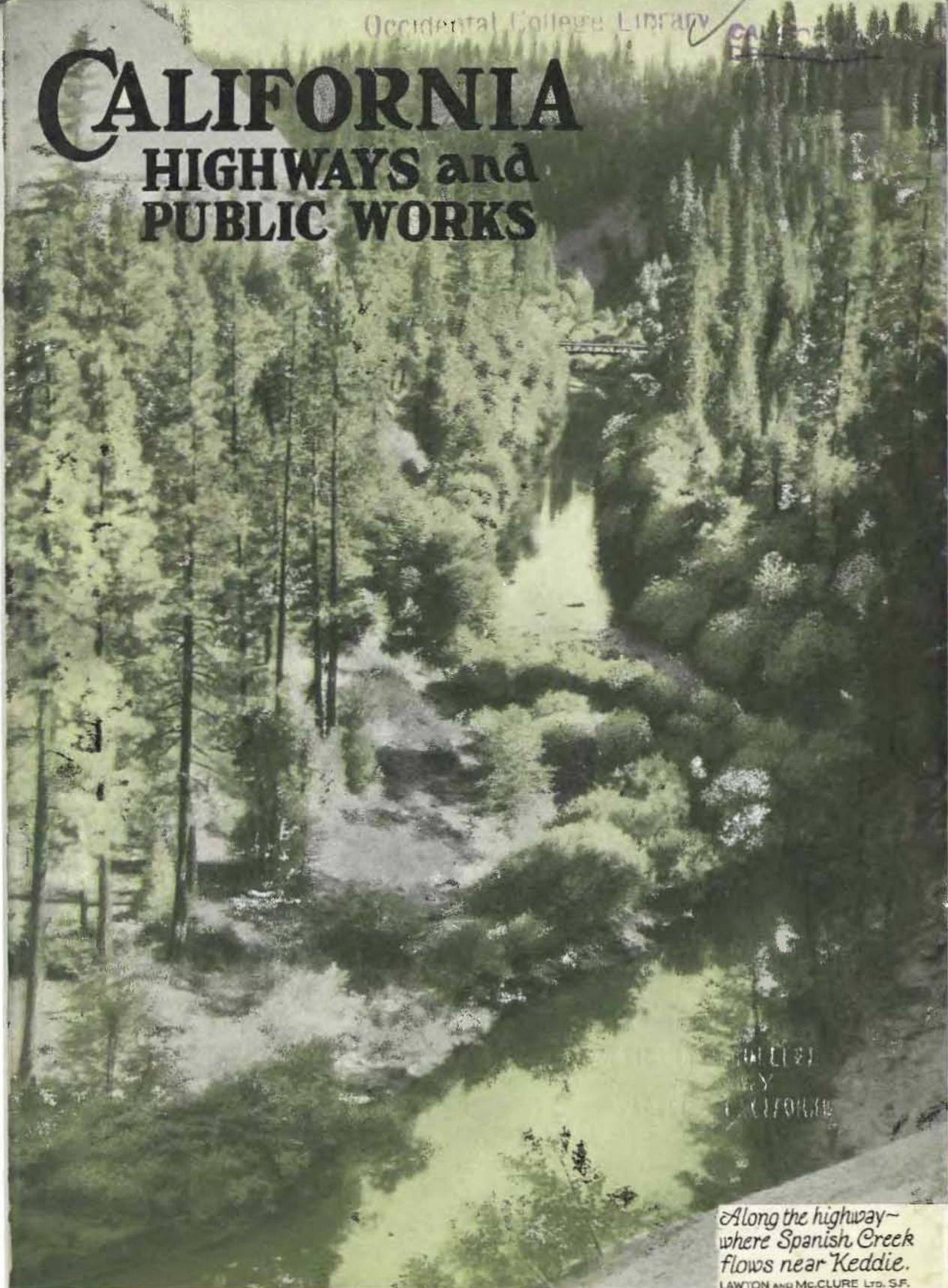


CALIFORNIA
PUBLISHED

CALIFORNIA HIGHWAYS and PUBLIC WORKS



FOREST
BY
CALIFORNIA

*Along the highway—
where Spanish Creek
flows near Keddie.*

LAWTON AND McCLURE LTD. S.F.

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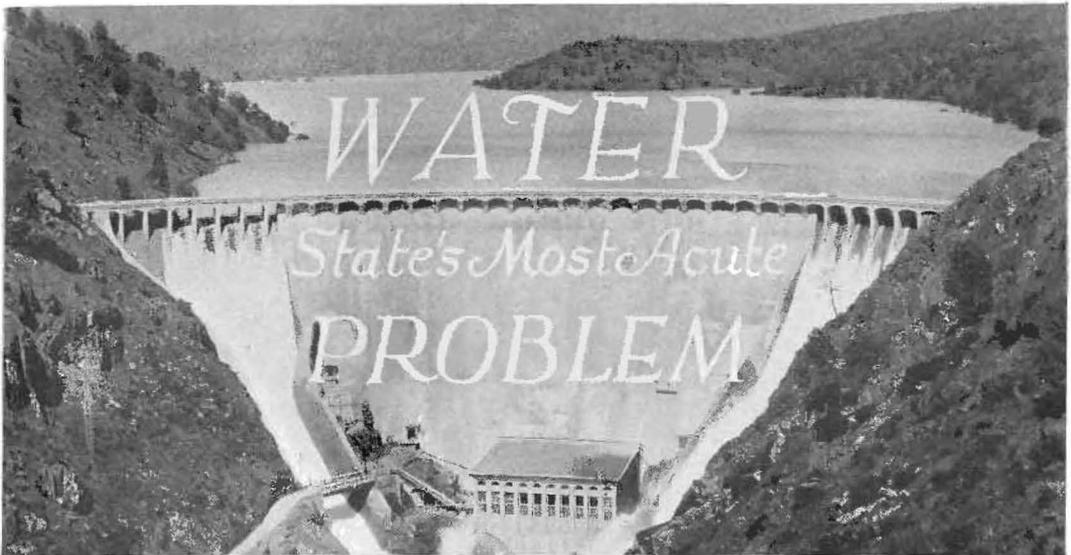
Vol. 9 # 8



Table of Contents

| | PAGE |
|---|------|
| Governor Rolph Issues Proclamation on Water..... | 1 |
| Keeping Tab on Auto Registration..... | 2 |
| <i>By B. A. Travis, Assistant Chief Clerk, Department of Motor Vehicles</i> | |
| State Takes Over 722 Miles of Roads..... | 4 |
| Highway Commissions, Past and Present, in Pictures..... | 5 |
| How to Build \$41,000,000 of State Structures..... | 6 |
| <i>By Geo. R. McDougall, Chief, Division of Architecture</i> | |
| Warning Signs on State Highways Revamped..... | 7 |
| Pioneer Days Linked to Present Day Road Building..... | 9 |
| <i>By Frank B. Durkee, General Right of Way Agent</i> | |
| Colorful Ceremony at New Bridge Dedication..... | 10 |
| Eighteen Patrolmen Cited for Meritorious Service..... | 12 |
| Chief Cato and Russell Bevans Have New Titles..... | 13 |
| Scenes Along Newly Opened Rim o' World Highway..... | 15 |
| Orchards, Rice and Crops Saved by Cooperation..... | 18 |
| <i>By H. M. Stafford, Sacramento-San Joaquin Water Supervisor</i> | |
| Engineers' Progress Reports Covering Many Counties..... | 22 |
| Two Southern California Beach Bottlenecks Broken..... | 23 |
| Vital Statistics on Dam Construction..... | 28 |
| Apportionment of Motor Vehicle Fees Throughout State..... | 29 |
| Dam and Water Statistics..... | 31 |
| State Fair Promises to be Most Colorful in History..... | 32 |
| Photograph Shows New Buildings at Fair Grounds..... | 33 |
| What the Newspapers are Saying..... | 34 |
| Roadmen Break Patrolmen's Monopoly on Courtesy..... | 35 |
| Reduction Noted in Fire Hazards..... | 39 |
| What the Motorist Should Know..... | 40 |
| Highway Bids and Awards for July..... | 41 |
| National Analysis of Motor Laws..... | 42 |
| July Water Applications and Permits..... | 43 |





GOVERNOR ROLPH has announced the appointments of nine members of the California Water Resources Commission and has designated the Honorable Matt. I. Sullivan of San Francisco, former Chief Justice of the Supreme Court of California, as chairman of the commission. The other members are:

- D. K. Barnell of Merced.**
- James M. Burke of Visalia.**
- Shannon Crandall of Los Angeles.**
- Judge Francis Carr of Redding.**
- R. C. Harbinson of San Bernardino.**
- W. B. Mathews of Los Angeles.**
- Jesse Poundstone of Grimes.**
- A. M. Tarpey of Fresno.**

In appointing this commission Governor Rolph addressed a message to the People of California, calling attention to the seriousness of the water problem and the necessity for its early solution and called upon the citizenry of the State to consider earnestly and carefully the situation in order that an equitable solution be made to the end that the progress of California may continue unhindered.

His message says in part:

“I am addressing you at this time on an undebatable question that is of vital importance to each individual and every interest in California. It affects the present and future welfare and prosperity of the entire State. It is California's water problem. Nearly every section of the State has felt the effect of the water shortage that has come upon us during the long period of drought of the past several years.

“A real emergency exists. An equitable, constructive and immediate solution of the problem is essential to future well-being of the State. I consider it the paramount duty of the State and each citizen thereof to make every effort to bring about such a solution.

“During July, an important congressional committee, the House of Representatives Subcommittee on Appropriations for the Department of the Interior, spent twelve days making a study of the water needs and conditions of California and were strongly impressed with the seriousness of the water situation. At the conclusion of the trip Chairman Murphy of the committee very concisely expressed the thoughts of the committee as follows:

“I hope that you will start a campaign for the saving of the lives of the people of this State, the saving of their very estates, a campaign to save your State. It is just that serious in the minds of the members of our committee. I bespeak for you the hearty cooperation of every wide-awake citizen of the great State of California to grapple with this thing that is creeping upon you, that may destroy you.”

VISION AND ABILITY

“* * * I have given careful thought and serious consideration in selecting the members for the California Water Resources Commission, and have appointed men of broad vision and of outstanding ability in public affairs who will have the best interests of the entire State in mind when considering this most important question. * * *

(Continued on Page 16)

22,000 Smiths, 16,000 of Jones Family Keep Girls Hopping for Auto Data

By B. A. TRAVIS, Assistant Chief Clerk, Department of Motor Vehicles

“HELLO! Is this the Department of Motor Vehicles?”

“Yes, sir.”

“This is the police department of ——. We are trying to locate the owner of a car with license plates numbered ——. He ran over a man and went on without giving aid. Please tell us who he is and where he lives.”

“Hold the line, please.”

This little scene is repeated with variations many times daily in California. And the chances are ten to one the information will be secured and given the officer in less than a minute.

How the Department of Motor Vehicles keeps the records on more than 2,000,000 cars in the State so that information concerning the license numbers, registered and legal owners and engine numbers of any one of them may be obtained in a few seconds is a story of its own.

It was a simple matter a few years ago when the records of all cars in the State could be filed in a single room. But within a decade, registrations have leaped to such enormous proportions that an entire floor is required at Sacramento to keep the files of a single year.

The record of every car in the State, whether used for pleasure or business, owned by a private individual or public body is kept on a three-way system as follows:

1. Alphabetically, by name of the registered owner.
2. Numerically, by number of license plate.
3. Numerically, by number of engine.

In addition to the complete files kept in Sacramento, duplicate license plate files are maintained in San Francisco and Los Angeles, principally for the accommodation of peace officers interested in checking up “hit and run” drivers, stolen cars or in getting all the innumerable kinds of information about cars the officers need.

Twenty-four hour telephone service is maintained at the Sacramento and Los Angeles offices so that anyone may call in by day or night and receive the information desired. Trained operators are kept on the job so that it rarely requires more than a minute to get the information from the files and give it to the party wanting it.

The engine number file is known as the “master file” because it gives complete information concerning the owner, the license number, engine number and the legal owner of the car.

For police purposes, however, the license number file is by far the most valuable, since the officer seeking information about a given vehicle usually has only the number on the license plate. Hundreds of “hit and run” drivers are apprehended annually by this means.

“Does John Smith or Bill Jones own a car, and if so, what is the number?”

This is a question frequently asked. It might be hard to answer, for there are more than fifty John Smiths in the files and as many Bill Joneses. But usually the inquirer knows the address of the party or at least something about him that will

enable the operator to pick him out from the others.

The file will not only show the kind of car Bill Smith owns. It will also show the license number, the engine number, who Bill Smith bought it from and when.

Likewise, if Bill Smith sells his car the record will show to whom it was sold and when. Some cars change hands as many as five times in a single year. These changes are noted carefully in the record so that it would be impossible almost for anyone to impersonate Bill Smith and get away with it.

The magnitude of keeping the records is best evidenced by the fact that there are more



B. A. TRAVIS

"YOUR NUMBER?"—But it's auto license or engine numerals they're talking about when these girls of the Motor Vehicle Department answer the hundreds of "hurry-up, I-need-information" calls which are received by the department weekly. Here we have Sophie Svetich handing the query to Luella May Shubert, who rushes it to the filing cabinet workers seen below.



ALL BUT THE FINGER PRINTS—There's very little about your car that isn't on file at Sacramento. And it takes less than one minute to supply information concerning the same.

State Takes Over 722 Miles of Roads For Maintenance in Secondary System

SEVEN hundred and twenty-two miles of county roads were taken into the State Highway system for maintenance August 14.

This mileage becomes part of the secondary State Highway system under Senate Bill 46 passed at the last session of the Legislature.

Sponsored by Senators Nelson and Edwards of Orange, and Chester M. Kline of San Jacinto, the measure directs the Department of Public Works to "lay out and construct highways by the most direct and practical routes between present State Highway termini."

This clause will necessitate future abandonment of certain portions of the routes selected. Consequently boards of supervisors of the various counties in California were asked by the State Highway Commission to approve a resolution which obligates those counties to "resume full control and responsibility for such portions of county road as shall not be included within the layout of said State Highway as finally laid out, adopted and constructed."

\$1,109,600 FUND

The Highway Commission makes the point that what might at this time be the "most direct and practical" route may not be found so when general reconstruction work is begun at a future date.

There has been set aside in the budget \$1,109,600 for maintenance and reconstruction for the next two years.

"Present maintenance crews will handle the new mileage in so far as possible to the end that every available penny may be spent in maintaining a high standard of road," declares T. H. Dennis, maintenance engineer. "Future reconstruction must necessarily be carried out as the demands and funds for secondary roads will permit. One new State maintenance station will be established on the Inland Route."

Addition of these secondary roads followed passage of a Senate resolution providing, in part, that the Department of Public Works make a study of traffic on roads not then in the State Highway system which, either by

Following is a tabulation by counties, north and south, showing the mileage of secondary roads taken over August 14:

| NORTH | | Miles |
|-----------------|-------|--------|
| Contra Costa | ----- | 10.65 |
| Lassen | ----- | 4.60 |
| Modoc | ----- | 37.40 |
| Napa | ----- | 5.10 |
| Plumas | ----- | 55.80 |
| Siskiyou | ----- | 65.10 |
| Solano | ----- | 4.50 |
| Total | ----- | 183.15 |
| SOUTH | | Miles |
| Imperial | ----- | 10.05 |
| Inyo | ----- | 9.16 |
| Kern | ----- | 65.80 |
| Los Angeles | ----- | 30.65 |
| Mono | ----- | 37.79 |
| Orange | ----- | 25.40 |
| Riverside | ----- | 124.60 |
| San Bernardino | ----- | 56.80 |
| Santa Barbara | ----- | 39.80 |
| San Diego | ----- | 71.30 |
| San Luis Obispo | ----- | 33.85 |
| Ventura | ----- | 34.40 |
| Total | ----- | 539.60 |

reason of the large volume of State traffic which they were carrying, or by the relief that they would afford to heavy traffic upon present State highways, or as highways serving as important interstate links, might properly be included and added to the State Highway system.

ONE YEAR'S STUDY

The resulting report, completed by the Survey and Plans and Maintenance Departments, carried definite recommendations on the roads to be included, based on a year's field study of the traffic, topographic and economic features of various routes considered.

The 1931 session of the Legislature adopted these recommendations which were embodied in Senate Bill No. 46 which provided that: "The Department of Public Works is hereby authorized and directed to lay out and con-



THERE ARE SMILES that make them happy. Immediately above are Highway Commissioners at the end of a hard day's meeting. From left to right, Harry A. Hopkins, Frank A. Tetley, Earl Lee Kelly, chairman; Timothy A. Reardon and Phil A. Stanton. Smiling because they don't have to inspect their roads as did the gentlemen on top, Messrs. R. C. Irvine in the buckboard and J. L. Maude. They were of the Bureau of Highways. The picture was taken in Riverside County in 1896, and, to quote from Ben Blow's book, "California Highways," they drove seven thousand miles in this rig inspecting roads in every county in the State. James, my sports roadster.

\$41,000,000 Cost of State Building!

Method of Laying Out Work Explained

By **GEO. B. McDOUGALL**, Chief, Division of Architecture

DURING the 20-year period, 1913 to 1933, the State of California will have constructed at about 50 different locations, buildings and other structures and engineering works to serve these structures, of a total value of approximately \$41,000,000 and involving about 2000 different projects.

About \$16,000,000 was expended during the first 12 years of the 20-year period and \$25,000,000 will have been expended during the last eight years.

The architectural and engineering work involved has been done by and under the direction of the Division of Architecture of the State Department of Public Works.

PROVISIONS OF LAW

The law provides three means for doing this work:

The architects in two cases, the San Francisco State Building and the Sacramento State Buildings known as the Capitol Extension Buildings, were selected by means of public competition conducted by the State Architect under the provisions of section 11 of the State Building Act.

Architects in private practice have handled and are handling 28 projects as authorized by an act of the Legislature of 1929 known as Chapter 291, 1929.

All the remainder have been and are being handled by the Division of Architecture itself.

DIVISION UNIQUE

The Division is unique as an architectural and engineering organization for building design and construction in that it includes within itself all the services involved in starting with a vacant site and developing a complete institution ready for occupancy to accommodate from 200 to 3500 persons as the case may be.

When the number of sites under consideration for a particular institution has been reduced to four or five the Division is called upon to make preliminary general surveys as to building sites, water, electric and gas supplies and possibilities for sewage disposal. When the site has been selected and surveys have been made and plotted to determine the natural contours, a plot plan showing location of all the buildings and other structures required for the ultimate institution as agreed upon with the department and institution officials affected, is made.

PLOT PLANNING

This plot planning of State institutions corresponds to what laymen are coming to understand as regional and city planning and zoning.

In addition to this work connected with new sites for newly established institutions, surveys have been made and plot plans worked out covering the ultimate development of all existing institutions.

This work is one of the most important done by the Division. As new structures are erected and changes made, the plot plans are corrected accordingly, and so constitute a permanent and very easily accessible record of all structures and installations both above and under ground, including all roads and walks. Field surveying and office work are required to be practically continuous in connection with this plot planning.

As a basis to enable successive Legislatures to determine on provisions to be made out of current funds for continuing development to meet the needs resulting from growth of the State and obsolescence of old structures, a long-time building construction program is worked out by the Division in cooperation with



GEO. B. McDOUGALL

Warning Signs on State Highways Will be Revamped to Aid Motorists

REVAMPING of the entire sign-marking of State roads has been decided upon by the Division of Highways.

Coincident with changes in the speed laws of California, which went into effect August 14th, new markers for highway, residential and business districts were authorized by the Highway Department and erected by the California State Automobile Association and the Automobile Club of Southern California.

These signs are paid for by the State and erected and maintained by these two clubs.

In conformity with the plan to readjust road markings throughout the State, the maintenance department of the Division of Highways now proposes:

First: To make a study of the present signing on the Redwood Highway for the purpose of improving this service, particularly at curve locations.

Second: To place reflectorized standard signs at the more dangerous curves.

Third: To place unreflectorized signs at curves where the radii is less than 1500 feet.

Fourth: Reflectorized warning signs to be installed at important road intersections where a known hazard exists.

Fifth: Survey to be made in conjunction with the Auto Club of Southern California, of the Arrowhead and Old Trails Highway, with a view to establishing adequate markings on these roads.

Black figures on a white background have been used to designate the forty-five-mile-per-hour legal speed limit on highways. They are

30 inches by 24 inches in dimension and have been erected for the present only on main arterial routes over which the State has jurisdiction. While not reflectorized, they have been placed close enough to the lane of travel so that they might be picked up at night by auto lights and serve as a constant reminder that the Highway Patrol will strictly enforce the new law, as announced recently by Chief E. Raymond Cato.

Mandatory signs, made so by the recent new legislative act, have been set up at the entrance to residential and business districts to the right of the road looking toward the section into which the auto is driving. Those in residential zones are 24 inches by 30, white figures on a black background.

The first of these signs as the autoist enters a restricted district is reflectorized.

An innovation which should meet approval of the autoing public has been the posting at the end of a restricted zone of a sign informing the driver that he has now passed through the 25-mile limit area.

In the business district through which a State highway passes, a similar sign notifying the autoist he is in a 20-mile zone has been placed.

LICENSE LAWS HELP

Eight states, including California, with standard laws for licensing motor vehicle drivers, have had 20 per cent fewer traffic deaths since the passage of the laws than they would have had with increases such as have occurred in the nonlicense states, according to a report received by the California State Automobile Association.

**STATE
SPEED LIMIT
45
MILES**

Captain's Football Tackle Saves Life of Falling Worker

FOOTBALLERS, take heed! There's a mighty fine tackle wasting his spare time when he might be playing on the gridiron.

He's Captain W. L. ("Buck") McCarthy of the Fresno County Highway Patrol squad. And he demonstrated his tackling ability two weeks ago by turning it into a life-saving stunt.

He tackled a heavy man in midair at the tag end of a 35-foot fall!

During the recent serious Alder Springs forest fire, the highway patrol turned out to assist in quelling the flames. Among those present was Buck.

Jack Muir, an easterner visiting California, was working at the top of a bluff trying to dislodge a burning log to prevent it spreading fire. While chopping, he fell, ax in hand.

As he hurtled toward the rocky ground, 35 feet below, hanging grimly to the ax, McCarthy charged into him.

As "Buck" struck the flying worker, the ax flew from Muir's hand and he hit the ground at a fast roll, the sharp weapon barely escaping him. McCarthy was struck by a rolling rock as he made his flying tackle. His ankle was badly injured.

But he saved Muir's life.

TOLL BRIDGE BOUGHT

As a result of negotiations begun by Governor Rolph only a few days after his inauguration, the Blythe-Ehrenburg Toll Bridge became a free structure July 24th.

Movement to buy the bridge from the private company operating it and collecting tolls was begun in January when the Governor, following conferences with Governor Hunt of Arizona, named a committee to handle details.

Upon recommendation of Colonel Walter E. Garrison, head of this committee, the California Highway Commission voted \$115,000 as this State's share of the purchase of the bridge and agreed to maintain California's half of the structure.

The bridge is the longest and largest over the Colorado with the exception of Lee's Ferry Bridge.

* That's Fine—Officer (to couple in parked car) "Don't you see the sign: 'Fine for Parking?'"

Driver: "Yes, officer, I see it and heartily agree with it."

The average California motorist used 90 gallons more gasoline during 1929 than the average motorist throughout the United States. Each motorist in the country averaged 544 gallons of gas that year, while the California motorist used 634 gallons, or nearly 17 per cent more than the National average.

Highway Officials' Annual Meet Called Brilliant Success

CONGRATULATIONS to the Western Association of State Highway Officials.

The annual meeting of this organization was held in San Francisco, July 10-11, and was attended by more than 100 highway officials and engineers of the Pacific Coast and inter-mountain states. It was a most successful meeting of the association.

The meeting was marked by a freedom of discussion and a wide range of topics. Much good will come from it. A closer contact has been established between the 11 western states on road building subjects.

A meeting such as this is the most important gathering that can be held. These men spend hundreds of millions of dollars annually for roads. They prepare the highways upon which tens of millions of people ride. Surely no other gathering of western officials compares to this one in importance to the nation.

The officers of the association deserve to be highly commended both upon the large attendance and the real value of the program and discussions. *Pacific Street and Road Builder* predicts that henceforth, each annual meeting will assume even greater prominence and that the association will develop into one of tremendous service to the West. We also congratulate the California highway officials who were in charge of the arrangements and the entertaining of delegates.—*Pacific Street and Road Builder*.

SAN DIEGO FIGURES

Motor vehicle registration figures for San Diego County show that a total of 79,040 passenger automobiles, trucks and motorcycles were registered at the beginning of this year in that area. The number of passenger cars was 74,486.

TRIP INTO MEXICO

Motorists of California are to have an opportunity of driving over and inspecting the northernmost link of the International Pacific Highway in Mexico on Sunday, September 13. The trip is being sponsored by the Nogales, Arizona, Chamber of Commerce.

This excellent opportunity for motorists to inspect the northern section of the great International highway carries with it many privileges. The Mexican customs, immigration and public health officers will dispense with all restrictions on entering Mexico and all motorists making the trip will be presented with a windshield sticker which will serve as a passport for the occasion.

Days of the Padres; Mining Romance Linked to Present Day Road Work

Romance of the early days, of the zealous padres and the gold mining camps of California, is drawn upon in the accompanying article to trace the history of rights of way throughout the State. Read before the annual meeting of the Western Association of State Highway officials in San Francisco, the paper deals in language easily understood by the layman, with the battle of California to provide adequate highways for the people of the State.

By FRANK B. DURKEE, General Right of Way Agent

TYPICAL of the changed attitude toward all phases of highway construction, is the importance now conceded to the question of title to rights of way. We have now arrived at the time when there must be no question of the public's right to the full use and enjoyment of an adequate right of way—nothing less will suffice properly to provide for the multiplying demands of modern highway traffic.

Early history of public ways in the West is the story of pioneer trails blazed, in the Southwest, by zealous padres, who carried the banners of Spain and Mexico, and in the central and northern states by those courageous men and women, who, consciously or unconsciously, determined to possess this western country for the United States. Those early trails were located almost in their entirety across public lands. What construction there was in the years before the automobile, to a remarkable extent, followed the locations sought out by the pioneers.

RULED THEMSELVES

In the days of the mining frenzy, highway improvement was left almost altogether to those individuals directly interested in keeping the roads open. The right of way, like the adjacent mining claim, was there for the taking. Thousands came to partake of the bounty of the Federal government; innumerable mining claims were located without any authority of law except that provided by the miners themselves.

More than two decades had passed after the discovery of gold in California before Congress moved to provide by law for entry upon the public domain for mining purposes.

A few years earlier, in 1866, the Congress passed an act providing:

"The right of way for the construction of highways over public lands, not reserved for public uses, is hereby granted."

This act is now referred to as **Section 2477 of the Revised Statutes of the United States**. It has remained unchanged from the day of its passage until the present. Out of this simple statute, of just twenty words, flows all the rights the public land states and their political subdivisions have to highway right of way across the unreserved public lands of the Federal government within their borders.

BRINGS LITIGATION

The act provides no maximum or minimum widths; no procedure for giving notice to either the Federal government or the public generally that the grant of right of way has been accepted. It applies, it should be clearly understood, only to the unreserved lands of the United States.

It was inevitable, as the West grew, that this statute should be the subject of litigation. Between lines of opinions of the learned men of the Federal and State courts, may be gleaned something of the fascinating story of the onward march of our western commonwealths. There is the case in which it was applied to the streets of a famous mining town of Montana; it was used to uphold the right of sheepmen in Wyoming to passage for their flocks through a certain pass in the mountains. It has been discussed and passed upon by courts in Wisconsin, Nebraska, Washington, Oregon, California and other states.

LAW'S INADEQUACY

Its meaning has been thoroughly adjudicated. To the attorney, it is a grant "*in praesenti*"; that is, "in the present." In other words, it was effective as a grant imme-

(Continued on Page 24)

Colorful Ceremony Held to Dedicate Bridge on Redwood Empire Highway

THE newly completed Mark West Bridge was officially presented to the traveling public July 31st by Earl Lee Kelly, chairman of the California Highway Commission, who, in his dedicatory speech, eulogized the beauties of the Redwood Empire and lauded the work of the Redwood Empire Association in building up the tourist industry within this scenic tour area.

Other speakers included: H. G. Ridgway, vice president of the Redwood Empire Association; Senator Herbert Slater of Santa Rosa; Max Schutz, master of the Healdsburg Progressive Grange; George Sehlmeier, master of the State Grange; Ed Enzenauer of Healdsburg, chairman of the Sonoma County Board of Supervisors; and Joseph Talbot of Bennet Valley, who first crossed a bridge at this point in 1860.

Paul Travis was chairman of the day.

WATER FOR CHRISTENING

Following the speaking program the bridge was officially christened by Miss Esther Travis of Healdsburg with a bottle of Sonoma County mineral water, which was broken on the railing.

The "breaking of the barrier" ceremony then followed, a ribbon barrier being held by Miss Maxine Lewis as "Miss Healdsburg" and Miss Katherine Aylward as "Miss Santa Rosa," while Miss Leona Simonson of Cloverdale as "Miss Grange" cut the barrier.

The dedicatory program and ceremony was initiated by the Progressive Grange of Healdsburg, with the cooperation of the Redwood Empire Association, also the Healdsburg and Santa Rosa Chambers of Commerce.

OFFICIALS PARTICIPATE

Those participating included: County supervisors; chambers of commerce officers, directors and members; senators and assemblymen, newspaper publishers, farm bureau and grange leaders, and others from Sonoma and neighboring Redwood Empire counties.

Representatives of the California Redwood Association were also in attendance. Speakers pointed out that redwood was chosen for the main structure of the bridge because

of its everlasting and permanent physical quality.

Some interesting historic features of this Mark West Bridge site were furnished by J. A. McMinn of Healdsburg, former chairman of the Sonoma County Board of Supervisors and Sonoma County's member of the Nine Counties Highway Committee of the Redwood Empire Association.

HARDY PIONEER

A hardy pioneer named Mark West settled on the banks of Mark West Creek near the new bridge in 1840. He there erected a large adobe structure in the year 1841, the lower floor of which was used for horses, the upper floor of which had a tier of living and guest rooms, together with a tremendously large dining room. The lower floor also served as a fort for protection against Indians and highwaymen, the walls being at least three feet thick, the main structure of the adobe being made of redwood.

Around this first unit a flourishing town was built. Here the main-line stage coaches arranged stopovers and other large hotels were constructed, in addition to many stores and other commercial enterprises. The community was a center of activity for all the surrounding territory. Colorful fiestas took place annually.

BIRTH OF RAILROAD

Then in the sixties two competitive railroad companies were organized and construction commenced of two parallel lines, each in competition with the other, through Mark West. Finally one bought out the other, which is now the Northwestern Pacific Railroad.

However, since the latter railroad course was through Fulton, Mark West moved to Fulton, leaving a ghost town behind him. Nothing remains at Mark West Bridge now to indicate that there ever was a community there, for it is surrounded by peaceful, quiet orchards and farm lands.

Immediately following the bridge dedication Chairman Kelly and Eric Cullenward, secretary of the Highway Commission, were conducted over the Russian River arterial

Sonoma Celebrities Turn Out in Force At Healdsburg Fete

routings by Redwood Empire Association officials, the following making up the party:

J. A. McMinn, member of the Nine Counties Highways Committee of the Redwood Highway Association; Supervisor Ed Enzenauer, chairman of the Board of Supervisors of Sonoma County; Frank McNamara, chairman of the Highway Committee of the Santa Rosa Chamber of Commerce; E. L. Finley, director of Redwood Empire Association were among those making the tour.

BEAUTY AND THE—dignitaries. It's the new Mark West Bridge dedication ceremony in Sonoma County over which Esther Travis ruled as Queen. In the rush below are the following from left to right: G. Lansing Hurd, J. A. Tedford, Harry Ridgway peeking over Tedford's shoulder; Paul M. Travis, master of ceremonies; Wallace Ware, Earl Lee Kelly, representing the Governor; Miss Travis, Max Schultz, Maxine Lewis (Miss Healdsburg), Laura Simonson (Miss Sonoma Grange), Katheryn Aylward (Miss Santa Rosa), Harry Dunbar, city manager of Santa Rosa; George Sehlmeier, master of the State Grange, and Ed Enzenauer, chairman Sonoma County Board of Supervisors. Just a happy family.

QUEEN "CROWNS" BRIDGE WITH BOTTLE OF WATER



18 in Patrol Cited For Merit; Several Capture Burglars

EIGHTEEN members of the California Highway Patrol were cited for performance of service of an unusually meritorious character during the month of July.

Six of these citations were issued to officers for services in preventing and extinguishing grain and forest fires. They were:

District Inspector J. R. Franck of District No. 2, Redding; Captain T. B. Myers of Lake County, Captain L. Wilson of Calaveras County, Officer R. P. Cornelison of El Dorado County, Officer J. Masini of Fresno County and Officer R. G. Trimble of Trinity County.

TWO CAPTAINS NAMED

Two captains, A. A. Morrison of Stanislaus County and L. S. Drais of San Joaquin County, were commended for the capture of two men wanted for burglary.

J. C. Lane, traffic officer of Kern County, caught two men engaged in smuggling two Chinese into the United States. For this he received a citation.

District Inspector E. L. Bruck was commended for detaining a man who later was found to be wanted in another state for embezzlement.

TRAPPED IN CARS

Captain E. Breuss of Glenn County was commended for extinguishing a fire in an automobile after it had overturned and endangered the occupants. T. J. Douarin, officer of Humboldt County, received a like citation for extinguishing a fire in a car that threatened three persons pinned beneath the vehicle.

J. Masini, Fresno County, was commended for catching a man wanted for murder, and L. H. Kober, Tulare County, was commended for capturing a man wanted in Washington for passing worthless checks.

C. E. Boomhower, Contra Costa County, received a citation for assistance in the capture of a bank bandit.

NABS TWO BURGLARS

T. Norwood, Sutter County, captured two burglars in a store they were robbing.

George Bray, operator's examiner working in Pasadena, was commended for attention to detail that resulted in the arrest of two men wanted for burglary and theft of an automobile.

Arrests Show Gain But Fines are Less Says Patrol Report

ALTHOUGH actual increase in personnel was but 9 per cent, officers of the California Highway Patrol increased their activities and gross volume of work 25 per cent during the first six months of 1931 as compared with the same period of the previous year.

The increase, reflected largely in the number of arrests and stops made, is shown in the semiannual report of patrol activities.

The average number of men employed on the highways during the period, including captains and patrolmen, but exclusive of inspectors, bureau heads and clerks, was 372 as compared with 340 for the same period of the previous year.

This number of officers stopped and warned a total of 162,346 persons for all types of violations for the six months, a gain of 27 per cent over the same period of the previous year.

They arrested 43,211, which number was a gain of 23 per cent. In performing their duties they rode a total of 4,380,919 miles during the six-month period, or 24 per cent more than for the same period of 1930.

Although arrests and stops show a 25 per cent increase, there was an apparent tendency on the part of the courts to be lenient with the violators. This was shown by a sharp drop in the gross amount of fines collected. Total fines for the six-month period of 1931 amounted to \$147,960 as compared with \$161,473 for 1930.

LARGE EXPOSITION

The world's largest exposition of machinery and materials—14,000,000 pounds of it—will be held in Detroit January 9-15, 1932, with the twenty-ninth annual convention and road show of the American Road Builders' Association. This event will assemble 25,000 road and street officials, contractors and manufacturers and distributors.

The American Road Builders' Association, a non-profit organization engaged in developing highways and effecting economies in road and street construction and upkeep, was organized in Detroit in 1902, and has grown to represent all highway activities.

Six officers received honorable mention for the capture of seven automobile thieves. They are G. D. Donnelly, J. L. Brey and C. D. Dempsey of San Luis Obispo County, E. M. Axtell and G. C. Malone of Siskiyou County and C. E. Boomhower of Contra Costa County.

Cato Named Chief; Bevans Temporarily Heads New Division

E. RAYMOND CATO has been appointed Chief of the Division of Enforcement of the newly set up Department of Motor Vehicles.

In other words, he is head of the California Highway Patrol.

Daniel O'Brien, Director of Penology, has been named Acting Director of the Department of Motor Vehicles by the Governor. He will occupy this position until such time as a permanent head be selected.

HAS TWO BRANCHES

The department, formerly the Division of Motor Vehicles under the Department of Public Works, is a new one created by the last Legislature. It consists of two branches, the Division of Registration under a chief known as the Registrar of Vehicles, and the Division of Law Enforcement, known as the California Highway Patrol.

Russell Bevans, Chief Inspector of the Highway Patrol, has been named Acting Registrar of Vehicles while retaining his inspector's rank. Bevans will take over the functions previously performed by Frank Snook, whose position automatically died at midnight August 13th, when the Division of Motor Vehicles went out of existence.

NAMES NEW MANAGER

Bevans has announced appointment of William McCarthy of the Recorder's office in San Francisco to the position of branch manager of the San Francisco registration office.

He further has announced that there will be no change now in the personnel of the headquarters office. That means M. A. Page will remain as Chief Clerk and B. A. Travis, Assistant Chief Clerk.

Roy Youngblood, whose title has been Assistant Superintendent of the Highway Patrol, has been named assistant chief under the new law.

He will continue to assist Chief Cato in administration of the Patrol.

Roadside trees planted by the Los Angeles County Forestry Department numbered 13,761 in 1950. The entire reforestation program for the year within the county showed field planting of 56,861 trees.

Charlie Andrew: "Say Stover, give me a speedy and brief definition of a dry dock."
H. D. Stover: "A physician who won't give out prescriptions."



Chief E. Raymond Cato

Colonel John Skeggs Weds in Santa Rosa

Colonel John H. Skeggs, division engineer, with headquarters in San Francisco, has returned to the Bay City with a bride.

She was Miss Ellanette Fagrelus of San Francisco.

The couple were quietly married July 2d at the Church of the Incarnation, Santa Rosa, the Reverend Egbert B. Clark officiating.

They left immediately for Cleveland, Ohio, where the Colonel was a delegate from Islam Temple to the imperial conclave of the Mystic Shrine.

Colonel Skeggs is one of the best known highway engineers in the West. He won wartime renown for his work in building roads under fire in France. He is scheduled to become Illustrious Potentate of Islam Temple next year.

The bride is from San Francisco, where she had been engaged in real estate activities.

OFFICIAL TRAFFIC COUNT PUBLISHED AS ADDENDUM

As an addendum to the August publication of California Highways and Public Works, there is being circulated with the magazine a semiannual report of a traffic count taken by the Division of Highways July 12th and 13th.

A comparison of this count with that of a year ago shows a decrease for all routes of the State Highway system of 5.6 per cent on Sundays and 0.6 per cent on Mondays. On the other hand, the gasoline tax for comparable periods of 1930 and 1931 shows increased consumption approximating 6 per cent. This paradox may be explained by the gas war which prevailed during the spring months, but which ended before the census was taken.

The supplement to the Highway Bulletin, mailed with this issue, gives complete details of the count in each county and road district of California.

Santa Monica Company Gives Land for Road

The most recent instance of wholehearted cooperation by property owners with State highway officials in the matter of furnishing rights of way for State highway purposes is conveyance of the required easement for a portion of the Roosevelt Highway near Ocean Park, Los Angeles County, through the property of the Santa Monica Dairy Company owned by Mayor H. Michel of Santa Monica.

The property is improved as a high-class dairy. Mayor Michel, on behalf of his company, has now signed the necessary papers for the right of way with no allowance to his company for the value of the land taken or for severance damages.

All that he has requested from the State is simply the cost of moving and replacing the existing facilities at the lowest figure determined by competitive bids received for such moving operations.

Forty-five states will spend more than \$1,000,000,000 for public construction in 1931, the President's Emergency Committee for Employment have announced.

Stampede: A lady was driving along a country road when she spied a couple of repair men climbing a telephone pole.
"Fools," she exclaimed to her companion, "they must think I never drove a car before."

Lost are Reunited, Stolen Cars Found By Auto File System

(Continued from Page 2)

than 22,000 Smiths alone in the files, not to mention about 16,000 Joneses and several thousand Whites and Blacks.

The files offer a quick means of stopping sales of stolen cars. As soon as a car is reported stolen, a "stop card" is placed in the engine file and duplicate cards sent to all branch offices of the division. As soon as an application is made to transfer the car, the applicant is held until he is able to explain his part of the transaction to the satisfaction of the authorities.

Lost relatives are located frequently and families reunited by means of the records, for they yield information concerning the address of more than 2,000,000 people.

It is possible also to gain considerably more specific information from the operators' file, where the records of licenses issued for drivers are kept.

These give the age and general personal description of every person holding a license to drive in the State and often show the information sought when all other sources fail.

In addition to the telephone service, the Division answers thousands of letters and telegrams every month from persons desirous of registration information.

The demand of the taxpayers of the State is so great for the information afforded that the Department employs constantly a force of 110 girls at Sacramento, San Francisco and Los Angeles, who do nothing but keep them in shape.

WAR ON TRAFFIC DEATHS

Confronted with a steadily mounting toll of traffic deaths and injuries in the State, the California Committee on Public Safety is taking steps to enlist the joint efforts of authorities and the public in a vigorous endeavor to reduce the traffic accident toll. State officials, civic leaders and representatives of organized motordom will be represented at a meeting of the executive committee of the state-wide group called for September 11 in San Francisco.

The California Committee on Public Safety consists of representatives of more than forty civic organizations and State departments interested in traffic safety. Motorists are represented by the California State Automobile Association and the Automobile Club of Southern California.

The gravity of the problem was emphasized with the recent issuance of a statistical report by the State Department of Motor Vehicles. The figures disclosed that during the first six months of this year the total number of persons killed in traffic accidents was 1216. This was 150 more than the number of deaths in the first half of 1930 and represented an increase of 14 per cent.

Rim o' World Road Partly Completed; More Work Planned

Fourteen and one-half miles of the Rim o' the World Highway, providing access to the beautiful San Bernardino Mountain region which includes Lake Arrowhead and Big Bear Lake, have been completed, as shown in the accompanying pictures. They are typical scenes along this attractive route.

The work was completed at a cost to the State of approximately \$725,000 for the last three contracts, and the road dedicated last month with appropriate ceremonies.

There is provided in the current budget, funds for completion of this route. Surveys



have been completed and five and one-half more miles of highway will be constructed at a cost of \$650,000. E. Q. Sullivan, district engineer, with headquarters at San Bernardino, will supervise the work.

This road is the most heavily traveled recreational State highway in southern California. It is thronged with traffic every week end, and, over the July Fourth period, the Forest Service reports 65,000 persons traversed it.

If you are planning on an auto trip and are looking for some good place to stop, don't overlook the railroad crossings.

Oh Yea? He was standing alone on the corner. He shook his head and mumbled: "No, no, no—no, no, no." And as the crowd grew larger his "no, no, no," grew louder.

An officer shook his arm: "What's the matter?" "Nothing at all," he replied. "I'm just a 'yes' man taking a day off."

Distinguished Men on Water Committee

Continued from Page 1

"The California Water Resources Commission will study and report upon the engineering plan proposed by the State Department of Public Works and other proposals, particularly as to economic, legal, legislative and financial phases, to the end that a definite program be submitted for consideration by a future session of the Legislature. It is my hope that such a program can be evolved and that this commission and the joint legislative committee will be able to draft such necessary legislation which can be considered favorably at a special session of the Legislature for submission to the electorate at the general election in 1932. * * *

ALL ASKED TO HELP

"Concerted and earnest effort must be made by all to the end that California continue to progress and prosper. Therefore, I appeal to you individually and collectively for your help in working out a proper and basically sound solution to our most important and pressing problem of water which confronts our State. As your Governor, I will do my part."

Governor Rolph also appointed fifteen honorary advisory committees representing all interests and localities in the State to lend their sound business judgment and experience to assist in formulating a proper plan for the development of California's waters.

The Legislature has also appointed a legislative committee of fourteen members, seven members from the Assembly and seven members from the Senate, to study the economic, legal and constitutional questions relating to the water resources and proposed plan for conservation, development and distribution thereof and prepare and submit such proposed legislation, resolutions and constitutional amendments as may be necessary to carry into effect a coordinated plan.

HERE'S COMMITTEE

Senator B. S. Crittenden of Stockton, San Joaquin County, was elected chairman of this committee; Assemblyman Robert P. Easley of Antioch, Contra Costa County, as vice chairman, and Assemblyman Robert L. Patterson of Bakersfield, Kern County, as secretary. The other members of the committee are:

SERIES OF ARTICLES ON WATER PROBLEMS WILL BE PUBLISHED

GOVERNOR ROLPH has publicly announced that he will call a special session of the Legislature to consider necessary legislation on California's water resources if and when the various interests and geographical divisions of the State reconcile their differences and are able to agree upon a practicable program of development which would be fair and just to all sections of the State.

Both the Governor's Commission and the Legislative Committee are actively engaged in the study of the problem. Many local committees have been formed to present the local problems in relation to the State-wide plan to the commission and committee.

Due to the widespread and increasing interest that has developed in the water problem, it is thought that a presentation of the various phases of the problem will assist in its successful solution.

To this end this magazine will outline the individual problems and views of the different localities in a series of articles. They will cover the Sacramento Valley and Sacramento-San Joaquin Delta, Southern California, San Joaquin Valley, the financial aspects of the problem and the relationship and interest of the Federal Government.

Senator C. C. Baker, Salinas, Monterey County.

Senator Ralph H. Clock, Long Beach, Los Angeles County.

Senator Frank W. Mixter, Exeter, Tulare County.

Senator W. P. Rich, Marysville, Yuba County.

Senator Andrew R. Schottky, Merced, Merced County.

Senator Ralph E. Swing, San Bernardino, San Bernardino County.

Assemblyman Edward Craig, Brea, Orange County.

Assemblyman Harold C. Cloudman, Berkeley, Alameda County.

Assemblyman John E. Frazier, Gridley, Butte County.

Assemblyman Frank S. Israel, Linden, San Joaquin County.

Assemblyman Chester M. Kline, San Jacinto, Riverside County.

Water Held Vital Need

TOO MUCH stress could not be placed upon the vital need of southern California for a greater water supply. Growth has advanced close to the point where no further development is possible until the supply has been procured and the machinery for its distribution is functioning.

When the Owens River aqueduct was constructed many scoffed at it as a useless expenditure. Had the croakers of that day been heeded this area could not have gained in population and wealth, nor could Los Angeles have become the metropolis that it is.

Occasion for increasing the water supply is even more evident than it had been when the faith of far-seeing men brought the aqueduct into existence. Even these men deemed that in providing water for a city of 1,000,000 they were doing enough for a long time, perhaps enough for an indefinite period. Pronounced as was their optimism concerning expansion, the situation today shows that they made an underestimate of the future's imperative demands.

Southern California must have this water. The question is one of industrial life or death.—*Long Beach Sun.*

HARD AT WORK

The legislative committee has held meetings in Los Angeles, Salinas and from August 5th to 14th held public hearings in San Francisco for the various interests and localities in the State and are hard at work in their study of the problem.

The long period of subnormal rainfall and the unparalleled growth and development of the State have increased the water shortage until it is recognized by both public and private agencies as being acute.

The problem is neither local in character nor confined to any one type of use. From Siskiyou to San Diego, not only from agricultural users, but from industrial, municipal and other consumers, demands for a solution of and relief from water shortage have multiplied year by year. In numerous cases due to continued use in excess of replenishment, supplies formerly dependable, have become seriously reduced. Population and water consumption have so increased that cheap and easily obtainable water supplies are now practically exhausted. It is, therefore, manifestly beyond the ability of community enterprises to overcome physical obstacles in securing additional water. The water which may yet be placed under control and conserved constitute the one natural resource limiting the future growth of population and wealth in California.

AGENCIES ACTIVE

Throughout the State, various agencies are actively giving the water problem their study and attention and are formulating the needs and views of the different localities. Widespread interest is shown and the people of California will successfully solve this urgent problem, as they have similarly solved great questions in the past.

The Governor's message and the names of the Governor's water commission, the legislative committee and of the honorary advisory committees have been published in a pamphlet by the Governor's office for distribution to the people of California. The pamphlet also gives a concise resume of the State water plan as recommended by the Department of Public Works with a map showing the distribution of the water resources of the State and a map showing the proposed plan.

WATCH THAT SPARK

Remember to put out cigars, cigarettes and pipe heels while on your vacation. Also the lighted match carelessly thrown on the ground. The Forest Service notes that 8,372,000 acres have been destroyed by fire in the last ten years, causing damage estimated at \$14,424,000. This is a heavy price to pay for wanton carelessness.

Nurse: "Have you ever run a temperature?"
Worse: "No, but I've driven most every other kind of car."

Orchards, Field Crops, Rice Saved By Cooperation in Lower River

By HARLOWE M. STAFFORD, Sacramento-San Joaquin Water Supervisor

ON JULY 10, 1931, the Feather River went dry at Nicolaus, about ten miles above the mouth, with a number of large irrigation pumping diversions below Marysville depending on its flow. Something had to be done to save the large area of orchards, field crops and rice which the river had been supplying.

The conditions were investigated by the Water Supervisor's office and after a number of preliminary conferences between the various water users and the State Engineer's



DRY AS SAHARA—That was the condition of the Feather River at Nicolaus recently until cooperation and appointment of a water master relieved the situation. This is a view of the river showing the bridge at Nicolaus.

office, two meetings conducted by Edward Hyatt, State Engineer, one at Sacramento on July 21 and the other at Oroville on July 22, resulted in relief action.

These meetings were attended by the larger water users on the lower river, by representatives of the Sutter-Butte Canal Company, the Western Canal Company, the Pacific Gas and Electric Company, and, at the Oroville meeting, by a representative of the State Railroad Commission.

It was apparent from the facts presented that if sufficient water in addition to the natural flow, claimed by the Sutter-Butte

Canal Company, were to pass down the river by the latter company's diversion dam a short distance below Oroville, there would be needed not only voluntary cuts on the part of the two large canals, Western and Sutter-Butte, but additional storage release by the Pacific Gas and Electric Company, owner of Almanor and Bucks Lakes in the North Fork drainage of the Feather.

It was shown that the releases from Almanor were already such as to keep the Caribou power plant running continuously at full capacity. However, as a result of the Oroville meeting the power company agreed to help further and an additional release was made from Bucks Lake. This, together with the temporary cuts of Western and Sutter-Butte canals furnished a flow which sent the water to a point below Nicolaus Bridge, supplying all pumps except those of Sutter Basin Company two and one-half miles above the river's mouth.

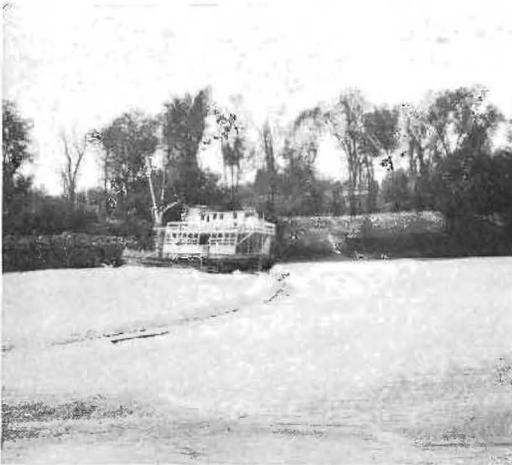
At both the Sacramento and Oroville meetings the need was stressed for a State Water Master to insure the proper distribution of the available flow in the river and to effect such savings as might be possible through a schedule of rotation or other regulation of this nature. In fact, the additional release of storage by the power company was made contingent upon the placing of control of diversions in the hands of a State Water Master.

An agreement providing for a Water Master for the 1931 season was drawn up and presented to the water users at the Sacramento meeting with the State Engineer and the signatures were practically completed at the Oroville meeting. Fred E. Anderson, who had been covering the regular Feather River diversion measurements in connection with the work of the Sacramento-San Joaquin Water Supervisor's office, acted as Water Master beginning July 23 until shortly thereafter Wm. Allan Laffin was made Water Master, devoting his entire time to this work. A schedule of rotation among general crop water users was placed in effect and the water was conserved to the greatest possible extent.

Subsequently it was found that additional storage releases would be necessary to reach

Rigid Conservation Helps to Save Crops Along Feather River

the pumps of the Sutter-Basin Company below Nicolaus, and through representations of this company to the Pacific Gas and Electric Company and particularly in view of the fact that a strict control of all releases would be exercised by the Water Master, the power company by-passed a large additional flow



HIGH AND DRY—Another view of the Feather River at Nicolaus. The old boat is afloat on sand, being left stranded when the river ceased to flow at this point. Release of water by power companies and rigid conservation remedied the condition.

(in excess of the capacity of Caribou power plant) from Lake Almanor, beginning July 30, 1931. This flow reached the Sutter Basin pumps.

Up to the present time, through close regulation by the Water Master and a fine cooperation on the part of all water users, the Sutter-Butte Canal Company, Western Canal Company and Pacific Gas and Electric Company, the crops and fields which would otherwise have dried up have been successfully supplied. It appears probable that the present season's Feather River situation may lead to an action for ultimate adjudication of the water rights on the river below Oroville.

WHY IS IT?

Why is it that persons who scorn to cheat at cards think nothing of cheating in traffic?

This is one of the posers asked by the National Safety Council, which finds that we have one code of ethics for driving and another for the home.

Northern Gateways To State Show Big Influx of Machines

AUTOMOBILE traffic into California through the northern gateways has been greater during the past fourteen months than the volume of travel through the southern border stations. This is revealed in an analysis by the Highways Bureau of the California State Automobile Association of official figures for the period received from the State Department of Agriculture. The department checks all incoming cars at the border.

The period covered by the study is from May 1, 1930, to July 1, 1931. The total number of vehicles which passed through all the quarantine stations was 895,001. Of this number, 522,738, or 59 per cent, were cars registered in California.

IMPOSING AVERAGES

Those with California license plates checked through at the northern stations totaled 378,588, or 72 per cent of the resident cars, leaving 144,150, or 28 per cent, for the southern gateways.

This gives an average of 37,335 vehicles with a California license entering each month, an average of 27,042 for the north and 10,296 for the south.

Cars carrying the license plates of other states which entered during the same period were 372,263, or 41 per cent of the total.

MANY "FOREIGN" CARS

Of these "foreign" cars, 208,687, or 56 per cent, entered through northern stations, and 163,576, or 44 per cent, came in through southern border points.

An average of 26,590 "foreign" cars entered the State each month. With an average number of 2.6 persons per vehicle, these cars brought an average of 69,134 people into the State every month. The monthly average of such cars entering in the north was 14,906, and in the south 11,684.

Two truck drivers were all snarled up in the traffic at the intersection at West Broadway and Chambers Street, New York City. One of the drivers lost his temper and yelled at the other one: "Why don't you look where you're going, you great, big, cross-eyed, bow-legged, knock-kneed, son of a blankity blank, blank! blank! blank!! * * * pie-eyed dumb-bell!!"

The other driver smiling sweetly said, "You're nice looking, too, buddy."—*National Motorist*.

Roads Taken Into Highway System

Continued from Page 4

struct highways by the most direct and practical routes between the termini stated herein, which highways are declared to be, and classified as, secondary State highways. They are:

- (a) Alturas to Oregon State line, near New Pine Creek.
- (b) Quincy to State Highway Route 29, near Chats.
- (c) Vallejo to State Highway Route 8.
- (d) Walnut Creek to Oakland.
- (e) Weed to California-Oregon State line, near Calor.
- (f) Bishop to California-Nevada State Line (Montgomery Pass).
- (g) Bakersfield to Mojave.
- (h) Red Box Divide to Pine Flats (Route 61 to Route 62).
- (i) State Highway Route 26, near Colton via Pomona to Los Angeles.
- (j) State Highway Route 43, Waterman Canyon via Santa Ana Canyon to Newport Beach.
- (k) Beaumont to Riverside (Jackrabbit Trail).
- (l) Riverside to San Diego (Inland Route).
- (m) Pomona to Temecula.
- (n) Blythe to California-Arizona State line at the Colorado River and State Highway Route 64 to State Highway Route 26, near Indio.
- (o) National City to international boundary line, near Tia Juana.
- (p) El Centro to Calexico.
- (q) Oasis to California-Nevada State line.
- (r) State Highway Route 2 near Ventura to State Highway Route 4 at Castaic Junction.
- (s) From State Highway Route 31 near Cajon Pass to State Highway Route 23 near Lancaster.



CURVES IN STYLE? Well, They're not very popular with this gang. They are slope men beginning preliminary operations for the removal of curves on the Redwood highway south of Eureka near Pepperwood. Long range visibility prevents accidents.

County Supervisors Sent Resolution

Continued from Preceding Page



OIL RIGHT—this photo. The boys are moving in with machinery to start oiling sixty miles of road to the big hills on the Redding-Alturas Lateral. Modern equipment assures good results on this job.

- (t) Pomona to Fullerton via Brea Canyon.
- (u) Cambria to San Luis Obispo.
- (v) Santa Barbara to State Highway Route 2 at Zaca via San Marcos Pass.
- (w) State Highway Route 14 near Crockett to American Canyon route near Vallejo.

ADOPT SAFEGUARD

The provision in the bill that these secondary highways be laid out and constructed by the *most direct and practical routes* between the designated termini, will necessitate, as has been stated above, the future abandonment of certain portions of the routes selected. To guard against any misunderstanding on this score, the supervisors of the counties affected were requested by the Highway Commission to approve the following resolution, which embodied the description of the road taken over:

WHEREAS, Chapter 82 of the California State Statutes of 1931 declares the most practical and direct route between certain designated termini as secondary State highways, the California Highway Commission, under authority of section 365d of the Political Code of the State of California, will on August 14, 1931, extend State maintenance to the most practical and direct traversable county road between the designated termini. The following county road will be maintained:

Description of route then follows.

Therefore, Be it Resolved, That the County of _____, acting by and through its Board of Supervisors, does hereby consent to the California Highway Commission taking control of and maintaining the above described county road and does further agree that the State of California, acting by and through said California Highway Commission, may relinquish to this county, and this county will resume full control and responsibility for such portions of the aforesaid county road as shall not be included within the layout of said State Highway as finally laid out, adopted and constructed.

DO NOT QUALIFY

While the total mileage of these secondary roads, when laid out and constructed, will total 804 miles, the mileage actually taken over for maintenance is but 722.75 miles. This is due to the fact that certain portions of the routes considered did not qualify within the meaning of the act in being the most direct route, while on several routes no traversable route existed.

In these cases, the amount which would have been spent for maintenance, providing the routing was available, will now augment the maintenance funds set aside for the remaining new secondary roads in that particular county.

Keeping Pace With Road Improvements

A resume of work being done in many counties is given herein by two district engineers of the Division of Highways. The nature of the projects and the progress being made is reported.

From L. H. GIBSON, District V

SAN BENITO COUNTY: Plans are complete for a change of line from a point near the San Benito River north of San Juan Bautista to the Monterey County line. This is part of the change of line via Prunedale, a portion of which is now under construction in Monterey County to eliminate the San Juan Grade. On the lateral highway from three miles north of Hollister to the Pacheco Pass road progress is being made on resurfacing the road with asphaltic macadam. The Granite Construction Company is the contractor. On the Coast Highway throughout the district and on the Hollister lateral center line traffic stripe is being painted. McEverlast Company, Incorporated, is the contractor.

MONTEREY COUNTY: Progress is being made on the bridge across the Salinas River at Bradley. H. E. Doering is the contractor under the supervision of the Bridge Department.

On the Coast Highway from two and one-half miles north of Salinas to the Monterey-San Benito County line, a new road is being constructed through Prunedale. The roadbed is 36 feet wide and it will be paved with 20-foot Portland cement concrete. This project, with a portion of road to be constructed in San Benito County, will eliminate the old San Juan Grade from the main Coast Highway. The Peninsula Paving Company is the contractor.

The earth shoulders on the Coast Highway between Salinas and Chualar have been treated with fuel oil by the road mix method. C. W. Wood was the contractor. On the Coast Highway between San Lucas and three and one-half miles north, the earth shoulders have been treated with fuel oil by the road mix method. The contractor was the Granite Construction Company.

On the Roosevelt Highway a reinforced concrete arch bridge across Garrapata Creek, including a change of line three-tenths of a mile in length, is under construction. The Hanrahan Company is the contractor.

On the Roosevelt Highway a reinforced concrete arch bridge across Granite Creek, about 14 miles south of Monterey, is under construction. Geo. J. Ulrich Construction Company is the contractor.

SAN LUIS OBISPO COUNTY: On the Coast Highway between Paso Robles and two-tenths of a mile north of the San Luis Obispo-Monterey County line, the road has been reconstructed with a 36-foot roadbed and a 20-foot asphaltic cement pavement. The contractor was the Peninsula Paving Company. Within the limits of this project a new reinforced concrete bridge is being constructed across San Marcos Creek. L. C. Clark and C. E. Doughty are the contractors.

Between Atascadero and one and one-half miles south of Santa Margarita, the road is being reconstructed with a 36-foot roadbed and a 20-foot second-

From E. E. WALLACE, District VI

KERN COUNTY: Work on widening the grade and placing cutback asphalt borders between Bakersfield and Grapevine Station on Route No. 99 is proceeding rapidly.

The portion of this job, which is 17 miles on tangent crossing the desert south of Bakersfield, lies on a very deceptive grade. It is found that many motorists travel at an excessive speed, very often not realizing that there is a continuous down grade toward Bakersfield, and many accidents have happened during the past years. By continuous vigilance and controlling the construction operations, it is believed that the accidents have been held to a lower minimum than ordinarily, had there been no contract in progress. Numerous flagmen are employed to warn and direct traffic, which has resulted in adequate protection for the traveling public. In a few instances, accidents have happened due entirely to excessive speed and disregard of warning signals.

Oiling contract on Route No. 57 from west boundary of Kern County to towards Maricopa, nine and one-half miles being done by the Pacific Tank Lines, Inc., has been completed and the outfit has moved to Fresno County, west of Parkfield Junction, for the completion of that portion of their contract.

A contract has also been awarded to Oilfields Trucking Company, Ltd., of Taft, for dust oiling approximately 30 miles from Democrat Springs to Weldon, on Route No. 57 in Kern County.

TULARE COUNTY: Union Paving Company is now making good progress on widening and resurfacing of highway on Route No. 99 between Goshen and Kingsburg. The paving plant is not yet started, but will do so about the first week of August. Many thousands of yards of earth are being hauled in from adjacent borrow pits to widen the roadbed to 36 feet and provide safe slopes for traffic. This improvement will result in considerable added safety to traffic, as about one-half of the 12 miles lies through alkali soil which is very treacherous during wet weather.

On the same contract five concrete bridges are being replaced or widened by Contractor Metzger. This work is well under way at the present time.

On July 8, advertisement was made for bids covering proposed improvement between Tipton Crossing and Tulare on Route No. 99 in Tulare County. This improvement will lie on a new location east of the Southern Pacific Railroad. The improvement will consist of a 36-foot roadbed, with 20-foot Portland cement concrete pavement. Bids are also requested for five bridges varying from 20 to 300 feet in length. This will be handled as a separate contract, but simultaneously with the road work.

This improvement, when completed, will eliminate two grade crossings of the Southern Pacific Company's main line, one at the south city limits of Tulare and

(Continued on Page 30, Col. 1)

(Continued on Page 30, Col. 2)

BOTTLENECKS broken. Recent widening of the heavily traveled boulevard on the Coast Highway north of Santa Monica has brought joy to motorists and relieved a serious traffic problem. The Topanga and Las Flores Creek bridges in Los Angeles County have been widened at a cost of \$26,200. Here's a view of the new road over the Topanga Creek and below the Las Flores Creek road.



New Right of Way Laws Are Urged

Continued from Page 9

diately upon its passage by the Congress and approval by the President. This grant, however, the courts point out, necessarily remains in abeyance until it is accepted by the public. Such acceptance must be by some definite act upon the part of a state or other public authority by which it takes possession of a definite parcel of right of way. As the law now stands, what constitutes acceptance is a fact to be determined in each particular case.

The inadequacy of the act as a solution of present day right of way problems on the public domain is evident when it is realized there is no agency of the Federal government that will undertake to say how much right of way may be taken under it; no department where maps may be filed; no effective way of giving notice to the public that rights have been acquired short of the actual, physical taking possession of the right of way.

It is unnecessary to urge before this body the obvious reasons why such indefinite title to rights of way does not suffice for modern highway needs—why some way must be provided to take advantage of the Federal grant between the time a new highway is projected and its ultimate construction.

MAPS ARE REFUSED

The Division of Highways of California has, on several occasions, sought to file with the United States land offices maps showing definite locations and widths of right of way across the public lands. The Land Office has refused to accept such maps for filing. A similar request, made through the Bureau of Public Roads, was definitely refused in recent months. It is the position of the Land Office that the act in question does not authorize acceptance for filing of right of way maps.

It has been pointed out that section 17 of the Federal Highway Act authorizes the submission of such maps to the Department of the Interior (which has jurisdiction over unreserved Federal lands) through the Department of Agriculture. Such procedure seems to be within the purview of this section, and, in California, we plan to take such action, if no better way can be found to protect the rights of the State.

ABUSES CITED

Section 17, however, in our opinion, is as inadequate as section 2477 of the Revised Statutes because of the length of time required to have a right of way reserved by this procedure, which is often several months. While the application is pending before the Federal departments, it is possible, and it frequently happens, that numerous mining claims are located along the line of the survey or even overlapping it. The easily accomplished staking out of a claim and filing for record of the required notice in the office of the county recorder places such mining locators in possession of that which the Federal government intended the public should have *free*—places such locators in a position to demand tribute for that which cost them nothing, which, frequently, they have no intention of exploiting as a mine but seek to use only for private profit as sites for gaudily painted roadside eating stands, gasoline stations, camp grounds, or other surface uses.

Under such circumstances, urgently needed highway improvements can not await determination of such questions as actual discovery of mineral deposits, valid filings, or priority of right—it is a question of the uncertainty of condemnation proceedings or paying, and, with the engineering department demanding clearance for the right of way, the right of way agent often is forced to make the best bargain he can.

MINING LOCATOR

To appreciate properly the situation, it is necessary to understand clearly the nature of the title of the locator of a mining claim. Such a locator, prior to patent, does not own the fee which, of course, remains in the United States. He has a possessory right, however, which, in California and other western states, is regarded as real property and is recognized as a legal estate of freehold. As against everyone except the United States, the locator is regarded as the actual owner. This doctrine has been upheld by the Supreme Court of the United States in a case as recent as January, 1930. This possessory right, if supported by a valid filing, dates from the time of the alleged discovery of mineral and extends to the exclusive possession and enjoyment of the entire surface included within the lines of the location, whether or not necessary for mining operations.

It is not necessary that the locator ever proceed to secure a patent from the United States; the law does not require that he do so—in fact, a patent adds little to his title. If he abandons the claim, he may return at any time to resume possession unless the claim has been relocated by another in his absence. Unless he applies for a patent, there may never be an examination to determine if mineral deposits actually exist within the claim or if a valid discovery has, in fact, been made. There is no limit to the number of claims one individual or a single corporation may locate or acquire. Land titles in California are clouded with innumerable filings of this nature.

TASK ALMOST HOPELESS

It is only when such filings are made within the national forests that an active effort is made by representatives of the Federal government to determine their legitimacy. The Forest Service, in California, has been campaigning against such locations for years, but the ease with which mining locations may be made brings a new crop with every new highway into the forest areas and, under existing laws, the task is almost hopeless.

Section 17 of the Highway Act provides also for the reservation of sites for quarries and other materials needed for the construction of highways on Federal aid and forest highway systems. But even when maps are filed and the reservation made by the department having jurisdiction over the lands in question, there is no assurance that a subsequent mining location may not be made, by a filing with the county recorder, and possession taken of the tracks desired by the State. This is equally true regarding reservations of rights of way under this section. To dispossess a locator under such circumstances may require court action and a costly delay in the highway construction program. Such a result is possible because, inconsistently, the reservation under the Highway Act is a

Proposes Changes in Mining Laws

Continued from Preceding Page

Federal record and the mining location is a State record, although both filings relate to Federal lands.

By the Leasing Act of 1920, the Congress effected a complete change of policy in respect of the disposition of lands containing deposits of coal, phosphate, sodium, oil, oil shale, and gas. Such lands are no longer open to location and acquisition of title, but only to lease. Mining in the national forests of the East is conducted under the lease system. Consistently and logically, this policy might be extended and made applicable to all forms of mining in the forests of the West. Such legislation would be, no doubt, an ideal means for overcoming the existing situation as regards highway rights of way across mining claims. Under such a system of leases or permits, the matter of rights of way could be made the subject of departmental regulation.

But we, in California, advocate no such radical remedy. We ask for nothing that will interfere with or impose a burden on any legitimate mining project undertaken in good faith. We demand relief only against those who, taking advantage of laws enacted to meet an entirely different situation in the time of our grandfathers, seek private gain by perpetrating a fraud against the government.

REVISION PROPOSED

To meet the situation herein briefly outlined, the following is suggested as desirable Federal legislation:

1. Amendment of the laws regulating the National forests to provide that the forests shall not be open to location for mining purposes; that mining within such areas shall be carried on only in accordance with rules and regulations to be promulgated by the Secretary of Agriculture. Such action will make it possible for the Forest Service to make fully effective permits granted by it for highway purposes.
2. Amendment of the Federal mining laws to provide:

- (a) That no location for mining purposes shall be valid for any purpose until notice of location is filed in the United States Land Office for the district within which the claim is located;
- (b) That no mining claim shall be located immediately adjacent to any public highway so as to interfere with the use thereof by the public or so as to be destructive of roadside values and beauties;
- (c) That every mining location shall be made subject to the right of the United States, any state, or political subdivision of a state, subsequently to enter thereon for the purpose of constructing public highways or removing therefrom road building materials, without compensation to the locator of the claim except for actual surface improvements in place within the projected right of way lines at the time the highway was laid out and established.

3. Revision of section 2477 of the Revised Statutes of the United States to provide:

- (a) For filing of maps in the respective land offices showing definite right of way locations and widths, such filing to constitute a reservation of such rights of way as against any subsequent patent, transfer or easement;
- (b) For filing of maps in the respective land offices for the reservation of sites for borrow pits and quarries or for the removal of other road-building materials for all public highways.

Such legislation is needed to remove the incentive for the filing of mining locations for other than legitimate mining purposes. Its enactment will bring the mining laws abreast of present-day conditions. It is necessary in the public interest.

Road Men Give Help In Putting Out Fire

The following letter, addressed to T. H. Dennis, maintenance engineer for the Division of Highways, needs no introduction. It speaks for itself:

Dear Mr. Dennis:

I was informed by State Forest Supervisor Nelander of Ukiah that on July 29th Road Foreman Jack Milford and three of his crew rendered valuable service on a fire about three miles south of Hopland, and that their efforts undoubtedly did much to save the valuable home of Mr. C. T. Smith, as well as to hold down what otherwise would have been a serious range fire.

I wish you would convey my thanks to Mr. Milford and his men for the valuable services which they rendered.

M. B. PRATT, State Forester.

C. R. Montgomery Named To Right of Way Post

C. R. Montgomery, Los Angeles attorney, and until recently connected with one of the large law offices of that city, has been appointed to the position of general right of way agent.

Mr. Montgomery graduated from Stanford University with the class of 1928 and was given the degree of J.D. by that university in 1930.

He was a high honor student at the university, having been elected to the legal honor society, the Order of the Coif. He also was named a member of Phi Beta Kappa and is a member of the Phi Delta Phi legal fraternity and of Beta Theta Pi.

Architectural Efficiency Explained

Continued from Page 6

each department and institution affected, and modified as necessary from time to time. The plot plans described above are an essential part of the foundation on which this long-time program is based and are indispensable for its preparation. This is one of the most important uses of the plot plans.

The ultimate plot plan of a particular institution takes into account, among other things, its site; its ultimate capacity; the speed of its development toward ultimate capacity as determined by the State's needs; the amounts of money that can reasonably be expected to be made available for expenditure on its development during succeeding bienniums.

The ultimate plot plan being available, the Division of Architecture in each of about thirty cases determines the particular structures which need to be provided during the ensuing biennium.

SKETCHES DEVELOPED

The State Architect or the Assistant Architect confers with the other State officers concerned, and, following the understanding reached at this first conference, a civil engineer makes and plots a survey of the site and preliminary sketches are developed.

In the making of the preliminary sketches the architectural designer has access for purposes of reference, to the principal architectural magazines for which the Division subscribes, to the Division's own library and to the very considerable collection of architectural works in the California State Library; he also has, as needed, the cooperation of the structural engineer, the mechanical and electrical engineer, the specification writer and the cost estimator who head their respective sections in the Division's organization. The elements of the project which are in the hands of these section heads are taken into account and scientifically incorporated in the architectural sketches as they are developed.

When the preliminary sketches and cost estimate are approved, copies of the sketches are placed in the hands of the chief architectural draftsman, who assigns various portions of the work of preparing the working drawings at small and larger scales among his staff of draftsmen. In addition to the supervision of the chief draftsman, the men pre-

paring the working drawings have particular supervision from the architectural designer and the Assistant Architect and the general supervision of the State Architect. Coordinating supervision is also available continuously as needed during the making of the working drawings from the structural engineer, the mechanical and electrical engineer, the specification writer and the cost estimator.

The administrative assistant to the State Architect, in addition to caring for the detailed business and financial administration of the Division's activities and coordinating its work with other State officers, departments and various institutions, also coordinates the entire technical program in the headquarters office so that the average of between 200 and 250 separate projects handled by the Division during each two-year period, distributed over the entire area of the State, costing between \$7,500,000 and \$8,000,000, are carried forward in an orderly, continuous and efficient fashion.

ACTUAL CONSTRUCTION

Construction work is handled either by contract or days labor. Coordination between the office and construction work in the field is maintained through the general superintendent of construction, who has immediate charge of all field work which is carried on under the continuous supervision of superintendents of building construction operating in the various parts of the State. A number of these superintendents have charge of the Division's work at two or three different institutions and have working under them an associate connected with each institution or single important project.

Governor Rolph's policy of speeding up construction work provided for by the 1931 Legislature for the purpose of relieving distress resulting from unemployment, securing the early completion of greatly needed buildings and obtaining for the State the financial benefits involved in present low construction costs, is serving also a further purpose. It is clearing the way to permit the Division of Architecture in addition to its regular work to start a year sooner than ever before to gather data needed and to do the necessary architectural and engineering work in connection with the projects in the ten-year build-

\$40,000,000 Total Building Program For 10 Year Period

ing construction program to be presented to the 1933 Legislature for consideration.

TEN-YEAR PROGRAM

This will make available for the first time in the history of the Division sufficient time for full and careful advance study of all projects, and for the completion of architectural and engineering office work by a time to permit of letting construction contracts as soon as the necessary funds are released.

It is expected that the building needs of the State during the ten years beginning July 1, 1933, will involve the expenditure of \$40,000,000. The organization of the Division of Architecture as herein indicated is such as to adequately care for this large program, taking fully into account all the great variety of services involved and giving full recognition to the highest ideals of both the art and science of the professions of architecture and engineering.

ARCHITECTURAL AWARDS For Month of July

List of projects handled by the Division of Architecture for which contracts were awarded by Colonel Walter E. Garrison, Director of Public Works, during the month of July, 1931.

| | |
|---|-------------|
| July 2, 1931—Paris Brothers—Rough excavating and grading site for Hospital Building, Veterans' Home | \$10,885 00 |
| July 8, 1931—Guth & Fox—Armory, National Guard of California, Yuba City | 18,946 00 |
| July 13, 1931—James L. Edmiston—Water well, California Institution for Women | 4,798 00 |
| Total | \$34,629 00 |

Horse Laugh: The true value of horse sense is clearly shown by the fact that the horse was afraid of the automobile during the period in which the pedestrian laughed at it.

Motor vehicle registration in San Francisco at the end of the first six months of this year had reached a total of 149,030. The number of passenger automobiles was 138,027, with the remainder consisting of other types of vehicles.

Only a few states have decreased their road appropriations for 1931 and the majority of them have made increased appropriations for this year, it is indicated in reports reaching the California State Automobile Association. In round numbers, a billion dollars will be spent on road construction and maintenance by State highway departments. California will maintain its budgeted expenditures of approximately \$100,000 a day in maintenance, new construction, and improving its road system.

Attention Engineers!

(From Oban, a seaport and tourist resort in Argyllshire, Scotland, this verse comes to us, through Mr. Gavin Gemmell, a director of the International Bitumen Emulsions Corporation, resident of London, who clipped it from the *Oban Times* and mailed it to the *BULLETIN*. While an interesting word-picture, it is incomplete to us on the Pacific coast, where in recent years one of the commonest phases of highway development has to do with the straightening of crooks and bends.—Editor.)—*Standard Oil Bulletin*, July, 1931.

THE GENESIS OF A ROAD

One day through the primeval wood
A calf walked home, as good calves should,
But made a trail, all bent askew,
A crooked trail, as all calves do.
Since then two hundred years have fled,
And I infer the calf is dead;
But still he left behind his trail;
And thereby hangs my moral tale.

The trail was taken up next day
By a lone dog that passed that way;
And then a wise bellwether sheep
Pursued the trail o'er vale and steep,
And drew the flock behind him, too,
As good bellwethers always do;
And from that day, o'er hill and glade,
Through those old woods a path was made.
And many men wound in and out,
And dodged and turned and bent about,
And uttered words of righteous wrath,
Because 'twas such a crooked path.
But still they follow (do not laugh)
The first migrations of that calf.

This forest path became a lane,
And bent and turned and turned again;
This crooked lane became a road,
Where many a poor horse, with his load,
Toiled on beneath the burning sun
And traveled some three miles in one—
And thus a century and a half
They trod the footsteps of that calf.

The years passed on in swiftness fleet;
The road became a village street,
And this (before men were aware)
A city's crowded thoroughfare;
And soon the central street was this
Of a renowned metropolis,
And men, two centuries and a half,
Trod in the footsteps of that calf.
Each day a hundred thousand rout,
Followed the zigzag calf about,
And o'er his crooked journey went,
The traffic of a continent,
A hundred thousand men were led
By one calf, near three centuries dead.

—Anonymous.

Vital Statistics on Dam Construction

Applications for approval of dams built prior to August 14, 1929, filed with the State Department of Public Works, Division of Water Resources, during the Month of July, 1931.

ORANGE COUNTY—Tuffree Dam No. 791-2. Anaheim Union Water Company, Anaheim, Calif., owner; earth dam, 8 feet above streambed with a storage capacity of 50 acre-feet, for storage purposes, for irrigation use.

SHASTA COUNTY—False Lake Dam No. 223. O. Merlo, Redding, owner; earth dam, 13 feet above streambed, situated on North Fork Jenny Creek tributary to Sacramento River in Sec. 4, T. 31 N., R. 5 W., M. D. B. and M., for storage purposes, for irrigation use.

MODOC COUNTY—Howe Dam No. 169. W. A. Howe, Alturas, owner; crib dam, 5½ feet above streambed with a storage capacity of 30 acre-feet, situated on Pit River tributary to Sacramento River, for diversion purposes, for irrigation use.

MODOC COUNTY—Duke Reservoir No. 2, No. 163-2. Royal E. Williams, Likely, owner; earth fill dam, 11 feet above streambed with a storage capacity of 20 acre-feet, tributary to South Fork Pit River, for storage purposes, for irrigation and stock use.

LOS ANGELES COUNTY—Elizabeth Lake Dam No. 781. Barkman C. McCabe, Los Angeles, owner; earth dam, 18 feet above streambed with a storage capacity of 1000 acre-feet, situated on Elizabeth Lake tributary to Elizabeth Lake Canyon in Sec. 10, T. 6 N., R. 14 W., S. B. B. and M., for storage purposes, for recreation use.

Applications for approval of plans and specifications for construction or enlargement of dams filed with the State Department of Public Works, Division of Water Resources, during the month of July, 1931.

SAN DIEGO COUNTY—Monte Vista No. 1 Dam. Sefton Investment Company, San Diego, owner; earth dam, 35 feet above streambed with a storage capacity of 10.3 acre-feet, situated on unnamed creek tributary to Sweetwater River in Sec. 31, T. 16 S., R. 1 E., S. B. B. and M., for storage purposes, for domestic and irrigation use. Estimated cost \$4,000, fees paid \$40.

SUTTER COUNTY—Wadsworth Dam No. 1-15. Sacramento and San Joaquin Drainage District, Sacramento, owner; flashboard weir dam, 173 feet above streambed with a storage capacity of 162 acre-feet, situated on Wadsworth Drainage Canal tributary to Sacramento River in Sec. 15, T. 15 N., R. 2 E., M. D. B. and M., for storage purposes, for raising ground water use. Estimated cost \$8,730, fees paid \$87.30.

LOS ANGELES COUNTY—North Side Water Company No. 1 Dam No. 809. North Side Water Company, Walnut, Calif., owner; earth dam, 8 feet above streambed with a storage capacity of 12 acre-feet, situated on South Fork San Jose Creek tributary to San Gabriel River in Rancho San Jose, for storage purposes, for irrigation use. Estimated cost \$1,500, fees paid \$20.

SANTA CRUZ COUNTY—San Vicente Creek Dam No. 632-2. Coast Dairies and Land Company, Davenport, Calif., owner; concrete gravity dam, 19 feet above streambed with a storage capacity of 15 acre-feet, situated on San Vicente Creek in Ranchos San Vicente and Arroyo de la Laguna, for storage purposes, for irrigation use. Estimated cost \$3,257, fees paid \$32.57.

Application for approval of plans and specifications for repair or alteration of dams filed with the State Department of Public Works, Division of Water Resources, during the month of July, 1931.

SHASTA COUNTY—False Lake Dam No. 223. O. Merlo, Redding, owner; earth dam, situated on North Fork Jenny Creek tributary to Sacramento River in Sec. 4, T. 31 N., R. 5 W., M. D. B. and M.

MODOC COUNTY—Duke Reservoir No. 163. Royal E. Williams, Likely, owner; earth dam, situated on Pit River in Sec. 9, T. 39 N., R. 13 E., M. D. B. and M.

PLACER COUNTY—Alta Forebay Dam No. 97-10. Pacific Gas and Electric Company, San Francisco,

owner; earth dam, located in Sec. 30, T. 16 N., R. 11 E., M. D. B. and M.

TUOLUMNE COUNTY—Lake Strawberry Dam No. 97-74. Pacific Gas and Electric Company, San Francisco, owner; rock dam, situated on South Fork Stanislaus River tributary to Stanislaus River in Sec. 15, T. 4 N., R. 18 E., M. D. B. and M.

TUOLUMNE COUNTY—Relief Dam No. 97-80. Pacific Gas and Electric Company, San Francisco, owner; rock dam, situated on Relief Creek tributary to North Fork Stanislaus River in Sec. 13, T. 5 N., R. 20 E., M. D. B. and M.

SANTA CLARA COUNTY—Lower Howell Dam No. 622-2. San Jose Water Works, San Jose, Calif., owner; earth fill dam, 30 feet above streambed with a storage capacity of 153 acre-feet, situated on Rundell Creek tributary to Los Gatos Creek in Sec. 31, T. 8 S., R. 1 W., M. D. B. and M.

NEVADA COUNTY—White Rock Dam No. 97-49. Pacific Gas and Electric Company, San Francisco, owner; earth and rock dam, 10.5 feet above streambed with a storage capacity of 578 acre-feet, situated on branch of North Creek tributary to Fordyce Creek in NE¼ Sec. 22, T. 18 N., R. 14 E., M. D. B. and M.

Plans and specifications for the construction or enlargement of dams approved by the State Department of Public Works, Division of Water Resources, during the month of July, 1931.

MODOC COUNTY—Enquist Dam No. 158. Emil Enquist, Davis Creek, owner; earth and rock fill dam, 10½ feet above streambed with a storage capacity of 750 acre-feet, situated on a fork tributary to Oliver's Canyon in NE¼ Sec. 24, T. 47, R. 12, M. D. B. and M., for storage purposes, for irrigation and stock water use. Estimated cost \$1,000, fees paid \$20.

Plans for the repair or alteration of dams approved by the State Department of Public Works, Division of Water Resources, during the month of July, 1931.

MONO COUNTY—Walker Lake Dam No. 533. Archibald Farrington, Mono Lake, owner; earth and rock dam, situated on Walker Creek tributary to Rush Creek in Sec. 7, T. 1 S., R. 26 E., M. D. B. and M.

CONTRA COSTA COUNTY—Port Costa Balancing Reservoir No. 581-2. California Water Service Company, San Francisco, owner; earth fill dam, 39 feet above streambed with a storage capacity of 41.7 acre-feet, located in SW¼ Sec. 3, T. 2 N., R. 3 W., M. D. B. and M.

MODOC COUNTY—Spaulding Dam No. 1, No. 154. R. D. Craig, Malin, Oregon, lessee; earth and rock dam, 5 feet above streambed, situated on unnamed drainage tributary to Tule Lake in Sec. 2, T. 42 N., R. 7 E., M. D. B. and M.

PLACER COUNTY—Alta Forebay Dam No. 97-10. Pacific Gas and Electric Company, San Francisco, owner; earth fill dam, 9 feet above streambed with a storage capacity of 65 acre-feet, situated on no stream in SW¼ Sec. 30, T. 16 N., R. 11 E., M. D. B. and M.

TUOLUMNE COUNTY—Lake Strawberry Dam No. 97-74. Pacific Gas and Electric Company, San Francisco, owner; rock fill dam, 132 feet above streambed with a storage capacity of 17,900 acre-feet, situated on South Fork Stanislaus River tributary to Stanislaus River in SW¼ Sec. 15, T. 4 N., R. 18 E., M. D. B. and M.

TUOLUMNE COUNTY—Relief Dam No. 97-80. Pacific Gas and Electric Company, San Francisco, owner; rock fill dam, 130 feet above streambed with a storage capacity of 15,122 acre-feet, situated on Relief Creek tributary to Middle Fork Stanislaus River in SW¼ Sec. 12, T. 5 N., R. 20 E., M. D. B. and M.

MODOC COUNTY—Duke Reservoir No. 163. Royal E. Williams, Likely, owner; earth dam, 10 feet above streambed with a storage capacity of 20 acre-feet, situated on a drainage tributary to Pit River in SE¼ Sec. 9, T. 39 N., R. 13 E., M. D. B. and M.

You owe so much to yourself that you can not afford to owe anyone else.

Auto Registrations Increase; \$8,823,591 Paid in Six Months

SUSTAINED increase in automobile registrations is noted in the monthly official report of the Division of Motor Vehicles. A gain is recorded of 39,563 registrations for the first six months of this year over those of 1930.

The following table reflects the gain or loss in registration by classifications:

| | As of 6-30-30 | As of 6-30-31 | |
|--------------------|------------------|------------------|-------------|
| Automobiles | 1,830,096 | 1,855,236 | 25,140 gain |
| Pneumatic trucks | 73,853 | 85,675 | 11,822 gain |
| Solid trucks | 14,539 | 10,514 | 4,025 loss |
| Motorcycles | 8,182 | 7,949 | 233 loss |
| Pneumatic trailers | 32,521 | 39,054 | 6,533 gain |
| Solid trailers | 8,521 | 7,737 | 1,084 loss |
| Automobiles—Exempt | 30,903 | 32,012 | 1,109 gain |
| Motorcycles—Exempt | 779 | 958 | 179 gain |
| Trailers—Exempt | 3,801 | 3,923 | 122 gain |
| Transfers | 263,081 | 269,490 | 6,409 gain |

In the first six months of 1931, the Division collected \$8,823,591 from paid registrations, thus reflecting an increase of \$13,370 over the same period in 1930.

Apportionment of motor vehicle fees to the various counties and Division of Highways was made during the month. The sum divided was \$6,176,513. Of this amount, \$3,088,256 went to the Division of Highways and the other half was allotted each county in proportion to their registration count. Los Angeles received the largest share, with San Francisco second, Alameda third and San Diego fourth.

TO A HORSE

O Horse, you are a wondrous thing.
No horns to honk, no bells to ring;
No license buying every year,
With plates to screw on front and rear.
No spark to miss, no gears to strip;
You start yourself, no clutch to slip;
No gas bills mounting every day
To steal the joy of life away.
Your inner tubes are all OK
And, thank the Lord, they stay that way.
Your spark plugs never miss or fuss;
Your motor never makes us cuss.
Your frame is good for many a mile;
Your body never changes style,
Your wants are few and easily met—
You've something on the auto yet.

—Royal Arcanum Bulletin.

QUITE FUR

"Oh, constable, I feel so funny."
"What's the matter, madam? Have you vertigo?"
"Oh, yes, constable, about two miles."—National Motorist.

HERE'S HOW AUTO FEES WERE PAID TO COUNTIES

Following is a tabulation showing apportionment of motor vehicle fees to the counties for the period January 1, 1931, to June 30, 1931:

| County | Total fee-paid registration | Counties' share of apportionment |
|-----------------------|--------------------------------|--|
| Alameda | 142,132 | \$218,795 63 |
| Alpine | 93 | 143 16 |
| Amador | 2,729 | 4,200 98 |
| Butte | 14,561 | 22,414 96 |
| Calaveras | 2,165 | 3,332 77 |
| Colusa | 4,715 | 7,258 18 |
| Contra Costa | 25,267 | 38,895 60 |
| Del Norte | 1,663 | 2,560 00 |
| El Dorado | 3,142 | 4,836 74 |
| Fresno | 57,774 | 88,936 33 |
| Glenn | 5,350 | 8,235 70 |
| Humboldt | 14,709 | 22,642 79 |
| Imperial | 23,575 | 36,290 96 |
| Inyo | 2,694 | 4,147 10 |
| Kern | 35,005 | 53,886 11 |
| Kings | 9,552 | 14,704 18 |
| Lake | 3,251 | 5,004 54 |
| Lassen | 3,777 | 5,814 25 |
| Los Angeles | 821,937 | 1,265,276 11 |
| Madera | 6,531 | 10,053 71 |
| Marin | 11,353 | 17,476 62 |
| Mariposa | 1,240 | 1,908 84 |
| Mendocino | 7,220 | 11,114 35 |
| Merced | 14,703 | 22,633 55 |
| Modoc | 2,650 | 4,079 37 |
| Mono | 562 | 865 13 |
| Monterey | 21,121 | 32,513 32 |
| Napa | 8,179 | 12,590 62 |
| Nevada | 3,413 | 5,253 92 |
| Orange | 48,414 | 74,527 70 |
| Placer | 9,196 | 14,156 17 |
| Plumas | 2,583 | 3,976 23 |
| Riverside | 30,408 | 46,809 57 |
| Sacramento | 46,952 | 72,277 13 |
| San Benito | 4,362 | 6,714 78 |
| San Bernardino | 47,950 | 73,813 43 |
| San Diego | 75,624 | 116,414 32 |
| San Francisco | 149,030 | 229,414 30 |
| San Joaquin | 38,925 | 59,920 50 |
| San Luis Obispo | 11,986 | 18,451 05 |
| San Mateo | 26,197 | 40,327 23 |
| Santa Barbara | 26,620 | 40,978 38 |
| Santa Clara | 57,121 | 87,931 11 |
| Santa Cruz | 15,631 | 24,062 10 |
| Shasta | 5,427 | 8,354 23 |
| Sierra | 803 | 1,236 12 |
| Siskiyou | 7,970 | 12,268 88 |
| Solano | 13,532 | 20,830 94 |
| Sonoma | 26,679 | 41,069 21 |
| Stanislaus | 26,299 | 40,484 24 |
| Sutter | 6,206 | 9,553 41 |
| Tehama | 5,569 | 8,572 83 |
| Trinity | 848 | 1,305 40 |
| Tulare | 32,097 | 49,409 59 |
| Tuolumne | 2,973 | 4,576 59 |
| Ventura | 20,894 | 32,163 88 |
| Yolo | 9,783 | 15,059 79 |
| Yuba | 5,023 | 7,732 32 |
| Total fee-paid | 2,006,165 | \$3,088,256 95 |

L. H. Gibson Tells of Work Activity In District Five

(Continued from Page 22, Col. 1)

story asphaltic concrete pavement. The contractor is The Hanrahan Company. Between Arroyo Grande and Pismo, the earth shoulders are being treated with fuel oil by the road mix method. W. A. Dontanville is the contractor.

On the Roosevelt Highway between San Simeon and Piedras Blancas Lighthouse, the surface of the road has been treated with fuel oil as a dust palliative. W. A. Dontanville was the contractor.

On the Coast Highway between the northerly limits of Arroyo Grande and Berros Creek plans are complete for the reconstruction of the highway with a 36-foot roadbed and a 20-foot reinforced concrete Portland cement concrete pavement. This project will substitute for a right-angle turn, a curve of 1800-foot radius, in the town of Arroyo Grande, and correct alignment at other places. This will also involve the construction of a new bridge across Arroyo Grande Creek.

SANTA BARBARA COUNTY: On the Coast Highway between Los Alamos and Wigmore, the road is being reconstructed with a 36-foot roadbed and a 20-foot Portland cement concrete pavement. The work is about 40 per cent complete. Basich Brothers Construction Company is the contractor.

Between Gaviota and one mile north of Las Cruces the road is being reconstructed with a 36-foot roadbed and a 20-foot Portland cement concrete pavement. This work includes construction through Gaviota Canyon. Gist and Bell are the contractors. The work is nearing completion. Within the limits of this project there is being constructed a new reinforced concrete bridge across Gaviota Creek in the narrow portion of the canyon. Paul M. White is the contractor on the bridge under the supervision of the Bridge Department.

On the Cuyama lateral, between the second crossing of the Cuyama River and the Kern County line, a distance of 38 miles, the road is being surfaced with crush run base and oil rock surface 18 feet and 20 feet in width. The project is about 80 per cent complete. The Lang Transportation Company is the contractor. A portion of this project is located in San Luis Obispo County.

On the Cuyama lateral, between Buckhorn Creek and the second crossing of the Cuyama River, an armor coat is being applied to the road surface. J. F. Knapp is the contractor.

On the Coast Highway, between Gaviota Canyon and Tecolote Creek, bids have been received for the construction of oiled rock borders on each side of the pavement.

Visitor: "Who's that fellow out there who's swearing and blackguarding the workmen?"
Foreman: "That guy! He's an engineer."

Spelled DAM: Says she: "Isn't it wonderful how a single policeman can dam the flow of traffic?"
Says He: "Yes, but you should hear some of the motorists."

More Scotch: "Is there any truth in the report that Angus MacTavish bought the corner filling station?"
"Well, I don't know for sure, but the 'free air' sign has been taken down."

District Six Reports Rapid Progress in Road Construction

(Continued from Page 22, Col. 2)

the other at Tipton Crossing at a point approximately eight miles south. It will also eliminate two right-angle turns at both crossings.

Construction of oil-treated rock borders on Route 10, about 12 miles east of Hanford, is being done by State forces and covers approximately three and one-half miles of widening the existing 15-foot pavement to 20 feet.

FRESNO COUNTY: Work on the Kings River road is proceeding in accordance with the schedule of progress. Approximately ten miles of road are completed or under construction. About five miles of new road is open to public traffic. The opening of three miles of this road recently for public traffic eliminates about four miles of old road which was very narrow and crooked.

Pacific Tank Lines, contractor for oiling work, are completing dust oiling from the west boundary to two miles east of Parkfield Junction.

MADERA COUNTY: No major road work in progress, but a contract is under way for replacing a concrete bridge crossing Bradley Slough about one mile south of Chowchilla. The old structure has been removed and the new one is in process of erection.

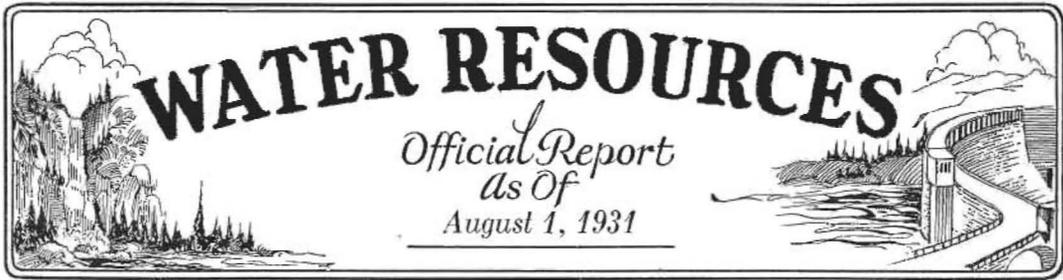
MERCED COUNTY: Major work in progress at this time consists of construction of an overpass separation at the Santa Fe crossing about one mile east of Merced on the Yosemite Route No. 18. This work is being performed by Contractor McGowan. Oil-treated detours have been constructed and are in use, and the contractor has done considerable grading, besides driving a number of steel piles.

On Route No. 32 at the foot of Pacheco Pass road to the Gustine road, maintenance forces are widening shoulders to a minimum width of six feet, and constructing gravel shoulders preparatory to shoulder oiling contract, which has been awarded to Stewart & Nuss, for approximately 38 miles, from the east boundary of Merced County to the foot of Pacheco Pass on Route No. 32.

MARIPOSA COUNTY: A. Teichert and Son expect to finish their contract of sealing oil-treated crushed rock surfacing with 90-95 road oil and screenings on or about July 22. This work is on Yosemite Lateral Route No. 18, east of Mariposa. Maintenance forces have completed dust oiling from Orange Hill School to Mariposa and are now engaged in applying oil treatment to the surfacing between Mariposa and Lorene's Station on the Briceburg grade.

Bids were opened on July 15, 1931, for construction of a graded roadway from Orange Hill School to Pain Flat. This is the portion of the Yosemite Highway Route No. 18 in Mariposa County, the easterly terminus being about seven miles west of Mariposa. It lies on a new location which departs considerably from the existing road and will be built to a much higher standard.

Toll charges on the bridge across the Columbia River between Pasco and Kenniwick, Washington, have been removed, it is stated, in a report received by the touring bureau of the Automobile Club of Southern California.



Steps taken by the Division of Water Resources to carry out its conservation plan, together with other activities of this department, headed by Edward Hyatt, State Engineer, are recounted in the official report for July. In other columns will be found details of the division's activities in connection with the recent visit of the Congressional Committee investigating the State's water problem. Here follows flood control and reclamation activities, tabulation of dam applications and irrigation news:

SACRAMENTO VALLEY

Early in the present year, through the medium of data secured from California cooperative snow surveys and available precipitation data of the U. S. Weather Bureau, State, districts and public utilities, the State Engineer's office prepared an estimate of the water situation, predicting that we could expect throughout the 1931 season to experience one of the driest years of record.

To prepare for all conservation of water possible, various departments of State and the water users themselves took cognizance of the situation and have been and are actively taking steps to meet the situation. The State Division of Water Resources and the Permanent Committee of the Sacramento-San Joaquin River Problems Conference representative of the water users throughout the Sacramento-San Joaquin territory are cooperating to effect conservation measures and provide for administration of the streams by a water supervisor. Letters have been sent in the name of the committee to all water users in the Sacramento-San Joaquin territory, advising them of the situation and recommending the most effective conservation measures possible.

The Rice Growers' Association of California has also forwarded a copy of the committee's letter with a supplementary recommendation to its entire membership. The Division of Water Resources likewise addressed a letter to its water right permittees calling attention to the possible necessity of regulating or suspending diversions in accordance with the priorities of the water rights. From the standpoint of the U. S. War Department, and its authority to maintain navigation, the department's representatives have also warned the water users that only with the utmost effort on their part to prevent waste and conserve water may the department be constrained to withhold drastic action in stopping irrigation diversions in order to maintain navigation.

Within the last few days the flow of the Sacra-

mento River at Sacramento has dropped to 200 second-feet or less, as shown by tidal cycle measurements, and corresponding to this record of low flow to the delta the salinity stations there have shown a very marked increase.

The intensive conservation campaign as planned early in the season among the water users above Sacramento and through the cooperation of the various conservation officers in the larger districts has continued, controllable waste has been practically reduced to nothing. There is a flow in the Colusa trough of about 200 second-feet made up mostly from seepage return and an effort is being made to reduce this by checking up the drains and installing booster pumps to lift the water from the drains to the canals, thereby permitting corresponding reductions in river diversions.

Although waste has been reduced to a minimum, the actual crop requirements appear to equal the entire in flow as well as return flow, so that the net flow at Sacramento is practically nothing. Under these conditions a present increase in the flow to the delta can apparently be accomplished only through an actual reduction in the upstream irrigated area.

The Feather River ceased to flow at Nicolaus, and negotiations entered into between the State Engineer, the lower water users and the directors of the Sutter-Butte Canal Company and Western Canal Company resulted in a voluntary agreement that these companies would limit their upstream diversion of water and thus release water for irrigation of the parched orchard lands along the lower river.

The summary of the results of this conference is that the Sutter-Butte and Western Canal Companies cut down their own use of water for a few days and diverters on the Feather River below Marysville cooperated with the State Engineer in the appointment of a water master to supervise and restrict diversions of water from the stream until the crisis passed.

The Pacific Gas and Electric Company agreed to send as much water downstream from Lake Almanor as it can use in generating electricity, thus assuring a consistent flow for the next month at least.

The water situation in Yolo County is also under discussion between the State Engineer and Yolo County officials. It may be that the county will enter upon an intensive investigation of the water resources of the county and a plan for their maximum economic utilization.

SANTA CLARA INVESTIGATION

Routine field work has been continued throughout the month on this investigation. When this investigation started in 1929, it was to be continued for three years. At the last session of the Legislature the act creating Santa Clara Conservation District was amended to allow it to issue bonds. They have now retained the

(Continued on Page 36)

Seventy-seventh State Fair Promises To be Most Colorful in its History

THE Seventy-seventh Annual California State Fair, first under the administration of Governor James Rolph, Jr., will be the most colorful in the history of California's exposition. It will be held in Sacramento, September 5 to 12.

One of the first acts of Governor Rolph on taking office last January was to program 1931 "Fiesta Year" in California. The State fair will be the crowning event of Fiesta Year.

As a result of the interest shown by the State administration in the State Fair, many improvements have been made at the Fair Grounds. The State is completing a \$200,000 building program which will give the fair two new buildings—a Sheep and Swine Building and a Poultry Building, which will be ready for the opening.

CARE OF PUBLIC

As the official governmental head of the State Fair, Rolland A. Vandegrift, Director of the State Department of Finance, has given attention to a number of improvements for the comfort and convenience of exhibitors and the public.

The State Fair this year will be colorful because of the many special attractions and features. The horse racing program is declared by racing fans to be the best in the fair's history.

The fair will display before the eyes of hundreds of thousands of visitors California's manifold products and almost limitless resources. Counties from the Mexican border to the Oregon line will display horticultural, agricultural and manufactured products as well as featuring recreational advantages.

PLAN NEW EXHIBIT

Charles W. Paine, secretary-manager of the fair, announces that exhibitors in the nineteen departments and entrants in the various contests will share in premiums and purses totaling \$125,000.

The Department of Public Works is arranging an exhibit, practically new over any heretofore shown, since nearly all its previous exhibits were destroyed by the recent fire at the fair grounds.

The entertainment program includes a daily delayed parachute drop by E. H. "Speed" Manning of Los Angeles, who will attempt to break his own world's record of falling 15,656 feet before opening his parachute.

Another feature attraction will be the personal appearance, Sunday afternoon, September 6th, of Lee S. Roberts, famous song writer, and his radio artists of the "Sperry Smiles" program. Roberts will present Governor Rolph with the original manuscript of his song "Smiles."

INCREASED EXHIBITS

The night horse show will bring increased competition, with \$20,000 in prizes to be distributed. Fifth place has been added to each class, which will increase the opportunity for the smaller stables to participate in the awards.

Under the leadership of the Tractor and Implement Club, the farm machinery show will surpass any event of this kind ever held in the State. Applications for space show an increase in the exhibits. A special entertainment program will be carried out daily in the Farm Machinery Building.

The California State Fair now has one of the finest exposition plants in the Nation. The new permanent buildings have replaced wooden structures in virtually all departments, giving the most modern exhibit facilities. Road improvements are being carried out and the parking space by which automobiles may be driven and parked inside the grounds, is being increased.

CUBA'S NEW HIGHWAY

The new Central Highway just completed in Cuba is one of the largest and most important works of its class on the American continent, stated M. A. Corrales, chief engineer, department of roads and bridges, Havana, Cuba, in a report to the American Road Builders' Association.

It has a length of 1139.5 kilometers. From the city of Pinar del Rio, in the westernmost province, to the city of Santiago de Cuba, in the easternmost province, it passes through 60 cities and towns and through vast and fertile lands, where natural dirt roads were the only means of communication.

Work began in May, 1927, was finished in February, 1931, and the highway was formally opened March 15, 1931.



FAIR ENOUGH! Knowing which section of this picture will be studied first, let it be known that the one on the left is Miss Naomi Sterling. Her aide is Miss Peggy Peterson. The scenery?—An airplane picture of the State Fair Grounds. Note the new Live Stock Building at the upper right-hand corner and the newly completed poultry structure at the bottom on the left. The Department of Public Works is planning a bigger and better exhibit this year.

CALIFORNIA HIGHWAYS AND PUBLIC WORKS

Official journal of the Division of Highways of the Department of Public Works, State of California; published for the information of the members of the department and the citizens of California.

Editors of newspapers and others are privileged to use matter contained herein. Cuts will be gladly loaned upon request.

COLONEL WALTER E. GARRISON.....Director
ERIC CULLENWARD.....Editor

Address communications to California Highways and Public Works, P. O. Box 1103, Sacramento, California.

Vol. 9 AUGUST, 1931 No. 8

CRAZY DRIVING

Figures on automobile accidents, fatal and otherwise, are not encouraging.

There never will be any better reason for more accidents or less, than more carelessness or greater care. When accidents increase, care is decreasing; and only greater care will produce fewer accidents.

When you see some of the driving that is visible at almost any hour of any day, there is no wonder that there are accidents. The only wonder is that there are not more.

Too many are speeding through city streets. A car at twenty-five or thirty miles an hour may be easy to control at intersections, while a car going just a little faster is beyond control when something happens suddenly.

Too many are dashing across street intersections with the drivers as stupidly heedless of contingencies as though theirs were the only cars in the world.

And some of the worst offenders are the young drivers of light delivery trucks. Drivers of big trucks for big houses go to safety school and are out for safety records. They do very well. Drivers of many smaller trucks for smaller houses obviously go to no safety school, and seem to be out for killing records.

What's the hurry?—*Texas Highways.*

* * *

Wanton wasting of water, anywhere in California, should bring reprehension of the public upon the person or corporation guilty of this waste. This State needs every gallon of available water. Shortage of precipitation through a period of several years has brought upon the State an acute water situation. There is no excuse for becoming unduly alarmed. But there is every reason for all the people to be extremely careful not to waste water.—*Long Beach Press-Telegram.*

Procession of Cars From Other States Aid to Prosperity

(From *Arroyo Grande Herald-Recorder*)

FEW can doubt the value of California scenery and good roads if they will spend even a short time watching the cars passing through Arroyo Grande almost any day in the week from other states of the Union.

Sunday the editor checked three cars from New York, two from British Columbia, two from Maryland, three from Texas, one from Arizona, one from Colorado, four from Oregon, four from Washington, two from Illinois, one from Minnesota and two from Nebraska, while parked for one hour on the State highway at the west city limits near the cemetery.

That should represent in a fairly accurate manner the traffic that is now passing into and through the State, for there was no reason why there should have been more out-of-state cars on a Sunday on that particular stretch of highway than on any other day on any other highway, for tourists select no particular day of the week for making their journeys.

When the number of out-of-state cars passing over this highway in this short time is considered, how many must there have been upon the thousands of miles of paved highway throughout California on that day?

These cars mean business for the communities they pass through.

* * *

Spending of \$29,000,000 this year by the State Department of Public Works is putting money in circulation. As long as the State is disbursing funds for worthy construction there can be no complaint from the taxpayers. Now is the time to build, and build wisely for the future.—*Sausalito News.*

WORLD AUTO CENSUS

World registration of motor vehicles totals 35,805,632, of which 26,697,398 were registered in the United States, according to a world census report just received by the California State Automobile Association. The census reveals a per capita registration of one motor vehicle for every 54 persons in the world, with the United States credited with one registration for every 4.59 persons against one for every 200 persons resident in all foreign countries. Another important fact is that despite the adverse economic conditions prevailing throughout the world during 1930, registration of motor vehicles increased by 678,234 over 1929.

Courtesy Monopoly Broken

Flock of Engineers Steps Into Print to Demand Word of Praise for Road Men

THE BOYS of the Highway Patrol better sit up and take notice. Their field is being invaded.

We are accustomed to turning to the Highway Courtesy Letters page for deeds of gallantry. We thought the motorcycle lads had a virtual monopoly on that kind of reading.

And now comes a flock of district engineers and upsets the apple cart.

"HEAVY DUTY" DONE

Mr. F. G. Somner of District 9 sends in a letter from Miss L. L. Norris, director of the Touring Department of none other than the National Automobile Club, itself a service organization. Miss Norris has most kind words to say of one of the brave lads of the Highway Division, "Bill" Finch, heavy duty equipment operator in Somner's district. The letter explains the "heavy duty" done by Bill. Here it is:

Dear Mr. Somner:

I wish to express to you my sincere appreciation for service and assistance rendered to me last Friday by one of your employees, Mr. Finch.

While driving over Tioga Pass, about half way to the summit, experienced motor difficulties, and my knowledge of an automobile being limited to operating it and not including its inner workings, was somewhat at a disadvantage. After sitting there about 10 minutes, Mr. Finch stopped and asked if he could be of assistance. After working very diligently, he located the trouble in the pump and soon remedied it, enabling us to continue on our way.

It was not only the fact that he rendered invaluable assistance, but the very courteous way in which it was done, that meant so much, and you are to be complimented on having such a courteous and capable employee.

AID FOR DISTRESSED

Then Mr. R. E. Pierce of District 10 gets a cheer from Dr. I. I. Lasdan of San Francisco, whose letter says:

Please permit me to express my sincere thanks and appreciation for the valuable service you have rendered in the patrol of Ebbetts Pass during the July 4th holiday.

I specially want to commend one of your men, Mr. L. O. Petersen, covering that section, for the aid he has rendered in our distress.

My automobile broke down at the summit. Mr. Petersen happened to come along about 4 p.m. For

Highway Patrol's Thunder Is Stolen When "Heavy Duty Bill" Finch Does Gallant Deed

three hours he worked and made every effort to start it; we finally had to abandon it by the wayside and were taken to Markleeville in his truck.

A warm expression of thanks for courtesy extended has been received by Mr. L. H. Gibson, district engineer at San Luis Obispo, from A. Marks of Taft, who writes:

Just recently I was the recipient of a courtesy from one of the employees of the Highway Division working out of your district. I have occasion to make the trip from here to Santa Cruz Mountains, where my home is located, many times during the year. A few weeks ago I was coming to Taft from Paso Robles and had a flat tire. I was too ill to change it myself. One of the highway trucks came along and upon my request Mr. J. R. Berry, located at Shandon, had the tire changed for me.

It is not only an object lesson that one must not lose faith in humanity, but that "He profits most who serves best," and I assure you that this courtesy on the part of one of your employees is sufficient evidence that he is the right man in the place that he occupies.

GOOD SAMARITAN

Four gentlemen, Dr. Jack Frost and Messrs. R. A. Crosby, Bob Johnston and Francis McCulloch, all of Los Angeles, report a Good Samaritan deed as follows:

Your office undoubtedly receives numerous complaints. For a change, here's one that is commendation and not a complaint.

Our party of four were fishing in Saddlebags Lake near the top of Tioga Pass. Fishing was good and we stayed until the last dog was hung. About half way down the Tioga grade near what is known locally as the "Big Blue Slide," we found the road closed and were informed by your general foreman, Mr. Paul Peak, that it would be impossible to cross before noon the next day.

One of the party was ill and we were extremely anxious to get to a lower elevation. Mr. Peak's car was trapped at the lower end of the slide, while we were above. He volunteered to use his own car, walk the party in question over the slide and haul them to Mono Lake. He furthermore extended to us the hospitality of the construction camp, such as it was.

We accepted his hospitality, were put up for the night, and both Mr. and Mrs. Peak bent every effort to make us comfortable, even to preparing breakfast the following morning.

Almost anyone may be genial and good natured when everything goes well, but when a man has put in a full day's work, several hours overtime, and is faced with the prospect of an all-night task and can still be as thoroughly polite and considerate as Mr. Peak, he certainly deserves special commendation.

Water Problems of Various Counties

(Continued from Page 31)

services of an engineer, and he is working on a plan for development of the valley, and it may be that the State's investigation will not be continued during the coming season.

NAPA VALLEY INVESTIGATION

Readings of water levels in various wells and intermittent stream flow measurements have been made on the Napa River, Rector and Conn creeks. A meeting was had with the Board of Supervisors for the purpose of arriving at some agreement with respect to future cooperation. The Board of Supervisors of Napa County feel that the investigation should be continued until there is a wet year and propose to appropriate funds for the coming biennium under the agreement between the State and the county which began in 1929. It was originally proposed to continue the investigation for a three-year period which the coming year will terminate. It is not known at the present time how intensively the investigation will be carried on during this fiscal year.

SOUTH COASTAL BASIN INVESTIGATION

A report was completed on the work necessary for determining the possibility of salt water intrusion from the ocean into the pumping area of Orange County. The cost of the most necessary part of such investigation was estimated at \$19,000 and the matter was laid before the Orange County Cooperative Committee for presentation to the Board of Supervisors of Orange County as a basis for a request to appropriate the sum of money necessary to carry on the work. This investigation was made at the request of the committee. Additional special work was done on the matter of salt water intrusion along the entire coast line of South Coastal Basin.

VENTURA COUNTY INVESTIGATION

The Board of Supervisors of Ventura County made the unexpended balance as of July 1 of the money appropriated by them last year for the investigation, available to the State to match a similar amount provided for in the budget, which requires that cooperative funds must be deposited in the State treasury before State funds can be made available. The investigation is on a fifty-fifty financial basis, the appropriation by the State for the biennial period being \$25,000, and the county proposing to appropriate a like amount.

Drilling with a Calyx drill was started at Devil Canyon site on Piru River. The reservoir sites on Piru River have been a matter of special interest to the people of Ventura County because the new highway location of the ridge route will pass through one of three possible sites. The State, with the cooperative funds provided, will investigate all three sites.

SANTA BARBARA

The Board of Supervisors of Santa Barbara County has appropriated \$15,000 to match a similar amount of State funds provided in the budget for the investigation of the water resources of Santa Barbara County during the present fiscal year. A total amount of \$25,000 has been appropriated in the budget for the investigation of the water resources of Santa Barbara County during the biennium, the county of Santa Barbara proposing to make available a similar amount. These funds will be expended in making the investigation and laying out a coordinated plan for the development and maximum utilization of the water resources of Santa Barbara County.

MONTEREY AND SAN LUIS OBISPO COUNTIES

The Board of Supervisors of Monterey County has appropriated \$2,500 and the Board of Supervisors of San Luis Obispo County has appropriated \$1,000 for the investigation of the water resources of these two counties, with the exception of that portion of San Luis Obispo County south of the headwaters of Salinas River. The State has appropriated in the biennial budget \$7,500, which will become available when matched by funds from the counties referred to above.

WATER RESOURCES REPORTS

Satisfactory progress has been made in completing the reports on the water resources investigation covering the State water plan for the coordination, development, conservation and utilization of the water resources of the State authorized under the provisions of Chapter 832 of the Statutes of 1929. Two additional bulletins have been completed during the present month and are now available for distribution. They are:

Bulletin 25—"Report to the Legislature of 1931 on State Water Plan."

Bulletin 36—"Cost of Irrigation Water in California."

FLOOD CONTROL AND RECLAMATION

Maintenance of Sacramento and San Joaquin Drainage District—Small crews have been engaged in routine maintenance work consisting of cleaning canals, cutting noxious weeds and making minor repairs to structures. Irrigation of the willows planted for levee protection on the east levee of the Sutter By-pass has continued with the operation of four small pumps.

Sacramento Flood Control Project—On June 27th construction started on the weir in the Wadsworth

Move Made to Extend Snow Surveys

(Continued from Preceding Page)

Canal which is being built for the Reclamation Board. At this time all pile driving has been completed and flume and coffer dams have been constructed to take care for the flow of water in the canal. The site has been unwatered and excavation and form work for concrete will be commenced. At this date the work is approximately 50 per cent complete. Investigations were made and reports rendered on several applications before the Reclamation Board.

DAMS

To date 769 applications for approval of existing dams have been filed; 72 for approval of plans and specifications for construction or enlargement; and 163 for approval of plans for repairs or alterations.

APPLICATIONS FOR APPROVAL OF PLANS AND SPECIFICATIONS FOR CONSTRUCTION OF DAMS

| Dam | Owner | County |
|-------------------|------------------------------------|-----------|
| Wadsworth | Sacramento-San Joaquin Recl. Dist. | Sutter |
| Monte Vista No. 1 | Setton Investment Co. | San Diego |

APPLICATIONS FOR APPROVAL OF PLANS FOR REPAIRS OR ALTERATIONS

| Dam | Owner | County |
|----------------------|------------------------------|-----------|
| Lake Norconian, West | Rex B. Clark | Riverside |
| South Lambert | The Irvine Co. | Orange |
| Walker Lake | Archibald Farrington | Mono |
| False Lake | O. Merio | Shasta |
| Duke Reservoir | Royal E. Williams | Modoc |
| Alta Forebay | Pacific Gas and Electric Co. | Placer |
| Lake Strawberry | Pacific Gas and Electric Co. | Tuolumne |
| Relief | Pacific Gas and Electric Co. | Tuolumne |

PLANS APPROVED FOR CONSTRUCTION OR ENLARGEMENT OF DAMS

| Dam | Owner | County |
|----------------------------------|--|------------------|
| Upper Alameda Creek Div. Enquist | City and County of San Francisco Emil Enquist | Alameda Modoc |

PLANS APPROVED FOR REPAIRS OR ALTERATIONS

| Dam | Owner | County |
|----------------------|----------------------------------|-------------|
| Round Valley | Pacific Gas and Electric Co. | Butte |
| Devils Gate | L. A. County Flood Control Dist. | Los Angeles |
| San Jacinto | J. C. Agee | Riverside |
| Lake Norconian, West | Rex B. Clark | Riverside |
| Walker Lake | Archibald Farrington | Mono |

SACRAMENTO-SAN JOAQUIN WATER SUPERVISOR

During the past month the regular field work has continued, comprising measurements of all diversions, stream flow, and return water throughout the Sacramento-San Joaquin territory.

The salinity sampling in the Sacramento-San Joaquin delta has been extended so that at present samples are being received from fifty-nine stations. The accompanying tables show the comparison between 1931 and 1924 stream flow and salinity data.

| Station | Discharge in Sec.-Ft. | |
|--------------------------------|-----------------------|------------|
| | 1931 | 1924 |
| Sacramento River at Red Bluff | 7/14 2,700 | 7/14 2,980 |
| Sacramento River at Butte City | 7/14 1,130 | 7/14 1,630 |

| Station | Discharge in Sec.-Ft. | |
|---|-----------------------|------------|
| | 1931 | 1924 |
| Sacramento River at Colusa | 7/17 900 | 7/17 1,590 |
| Sacramento River at Knights Landing | 7/15 330 | 7/15 1,130 |
| Sacramento River at Verona | 7/20 300 | 7/20 ---- |
| Sacramento River at Sacramento | 7/20 50 | 7/20 919 |
| Feather River at Nicolaus | 7/20 0 | 7/20 32 |
| American River at H St. Bridge | 7/20 90 | 7/20 10 |
| San Joaquin River near Vernalis | 7/20 220 | 7/20 408 |
| Combined flow of Sacramento River at Sacramento and San Joaquin River near Vernalis | 7/20 250 | 7/20 1,330 |

Salinity Tests Sacramento-San Joaquin Delta

| | Salinity in parts of chlorine per 100,000 | |
|--------------------------|---|---------|
| | 7/14/31 | 7/14/24 |
| Bullhead Point | 1,500 | --- |
| O and A Ferry | 980* | 805 |
| Collinsville | 810 | 798 |
| Emmaton | 290* | 464 |
| Three Mile Slough Bridge | 430 | --- |
| Rio Vista Bridge | 315 | 302 |
| Liberty Ferry | 58 | --- |
| Isleton | 146 | 114 |
| Antioch | 710 | 614 |
| Jersey | 430 | 296 |
| Webb Pump | 245 | 165 |
| Central Landing | 60 | 56 |

* July 10th.

Within the last few days, the flow of the Sacramento River at Sacramento has dropped to 200 second-feet or less as shown by tidal cycle measurements, and corresponding to this record low flow to the delta, the salinity at stations there has shown a very marked increase. The additional salinity stations have been added to record completely the encroachment of the salt, and special attention will be given to determination of the upper limits of the encroachment. Daily sampling has begun at Freeport and special traverses are being made from Paintersville Bridge to Sacramento to show the present rate of encroachment.

CALIFORNIA COOPERATIVE SNOW SURVEYS

Negotiations have been made with some of the cooperating agencies for certain extensions in the surveys involving the location of additional snow courses, shelter cabins, etc.

A conference was held at Ash Mountain, Sequoia National Park, between representatives of the Park Service, Tulare Lake Water Storage District, Kings River Association and the State, relative to future work in south and middle Kings River basins.

Arrangements were completed for the construction of a much needed shelter cabin on the route of the Blue Lakes survey.

WATER RIGHTS

APPLICATIONS TO APPROPRIATE WATER

Nineteen applications to appropriate water were received during the month of June, nine were with-

Irrigation and Water Storage News

(Continued from Preceding Page)

drawn or canceled and nineteen were approved. Four permits were revoked and thirty-five passed to license.

Among the applications received there was one for agricultural purposes by Stevinson Water District, 315 Chancery Building, San Francisco, to appropriate 175 cubic feet per second from McCoy Spillway, Arena Spillway, Livingston Drain, Bear Creek, Owens Creek, Duck Creek and Deadman Creek, tributary to San Joaquin River in Merced County, for the irrigation of 20,698 acres at an estimated cost of \$50,000.

There were two mining applications received for comparatively large amounts of water—one by D. R. Morrison and W. J. Cooley, c/o Daniel M. Hunsaker, Attorney, Rowan Building, Los Angeles, for 50 cubic feet per second from Elk Creek, tributary to Illinois River in Del Norte County, and the other by Magestic Mines Company of Weaverville for 100 cubic feet per second from Kush Creek, tributary to Trinity River in Trinity County, at an estimated cost of \$50,000.

Following are the more important applications approved:

One by Geo. F. Taylor of Downieville, allowing 50 cubic feet per second from Cherokee Creek, tributary to North Fork of Yuba River, for mining purposes.

One by Estelle I. Fraser of Coulterville, allowing 39 cubic feet per second from North fork of Merced River for power purposes.

Three by Florence Hogue of Los Angeles for a high-class subdivision in Monterey County: One allowing three cubic feet per second from Bixby Creek for power purposes at an estimated cost of \$9,000; one allowing one cubic foot per second from Bixby Creek, Cross Canyon, Daily Gulch and Bear Trap Canyon for domestic purposes at an estimated cost of \$22,000, and another allowing one cubic foot per second from Sierra Creek for domestic purposes at an estimated cost of \$8,000.

Inspections of projects under permit proceeded during the month in Butte, Glenn, Humboldt, Lake, Mendocino, Napa, Placer, Sacramento, Siskiyou, Sonoma, Sutter and Yolo counties.

ADJUDICATIONS

Los Alamos Creek (Santa Barbara County). Division's report as referee has been submitted to the Superior Court and a decree is expected in the near future.

Davis Creek (Modoc County). A tentative decree has been circulated among counsel and is now under consideration by the Superior Court.

Mill Creek (Modoc County). All but two of the water users have signed a stipulation for consent judgment.

Deep Creek (Modoc County). Distribution of the waters of Deep Creek was continued throughout the month in accordance with the trial schedule of allotments which was adopted at the conference held at Cedarville on March 16, 1931.

Franklin Creek (Modoc County). Administration of the schedule of allotments for trial distribution during the 1931 irrigation season was continued throughout the month.

New Pine Creek (Modoc County). Field work on the investigation of the water supply and use of water on New Pine Creek was continued throughout the month.

Eagle Creek (Modoc County). Field work on the Eagle Creek investigation was continued throughout the month. A plane table survey of the ditches and irrigated lands was commenced late in June and is now nearly completed.

IRRIGATION, WATER STORAGE DISTRICTS

Office conferences were had concerning the feasibility of organizing an irrigation district in the vicinity of Arbuckle, Calusa County, and a water conservation district near Yuba City in Yuba County.

Field visits for the purpose of obtaining information, conferences or for the investigation of matters relating to their interests were made to the following irrigation districts: South Montebello, Walnut, La Canada, Palmdale and Little Rock Creek irrigation districts, Los Angeles County; Mojave River irrigation district, San Bernardino County; Alpaugh irrigation district, Tulare County; James, Stinson, Riverdale, Laguna and Fresno irrigation districts, Fresno County; Turlock and Modesto irrigation districts, Stanislaus County; South San Joaquin and Woodbridge irrigation districts, San Joaquin County; Richvale irrigation district, Butte County; El Camino irrigation district, Tehama County; Anderson-Cottonwood irrigation district, Shasta County.

At a meeting of the California Bond Certification Commission held on June 29 at San Francisco the following matters were referred to the commission and favorable action taken thereon:

Nevada Irrigation District: Approval of order validating bonds of the district in the sum of \$50,000.

Approval of emergency expenditures by the district for development work in the district, \$50,000.

Approval of refunding bond issue of the district in the total amount of \$8,100,000.

Scott Valley Irrigation District: Approval of refunding bond issue of the district in the total amount of \$69,000.

FEDERAL COOPERATION

In connection with the Federal-State cooperation for irrigation investigations, an inspection was made in the early part of this period of the work being done in the Santa Ana, San Gabriel and Mojave River areas. The work in northern California in the Sacramento-San Joaquin delta has been reviewed and an agreement reached as to its conduct in the coming season.

In connection with the Federal-State cooperation for stream gaging, the program for the 1931-1932 season has been outlined. Certain phases, such as the quality of water investigation and the new stations to be established, are under discussion. A trip was made to arrange for the maintenance of a station on Kings River near Hume, and to select a site for a new station to be established on Kings River just above the North Fork. The Hume station has been maintained up to this time by the city of Los Angeles.

Constant Reminder to Public Brings Reduction in Forest Fire Hazards

WRITING in the June edition of the CALIFORNIA HIGHWAYS AND PUBLIC WORKS, Highway Commissioner Phil A. Stanton said:

"It has been a great thing for California, this highway system."

Now comes State Forester M. B. Pratt, executive secretary of the California Fire Emergency Committee, and says:

"It is a great thing for California, this highway system."

"Moreover," says the State Forester, "it always will be a great thing for California, this highway system, for other agencies seeking solutions to several grave problems confronting the State will turn to the State highway system as a vital factor in solving their problems just as we have found the highways to be an educational medium for reaching the people in fire prevention work."

PRESS AND HIGHWAYS

"On and along the State highway system and with the press we are getting our closest contact with the people in the educational fire prevention campaign. The press reaches the people with the written word; the highways, with the spoken word."

According to forest officials, the intensive educational work on fire prevention on and along the highways is already showing good results in fire records. **Very few fires are now being reported as originating from carelessness on the part of motorists using the highways.**

Forest officials go further and declare the motorists when they scatter from the highways to the recreational areas carry with them the training received on and along the highways against causing fires.

CAUTION REQUESTED

Motorists entering the State at the border stations, both motor vehicle checking and agricultural quarantine inspection, are greeted by highway patrolmen and quarantine inspectors who courteously request them to use every caution against causing fires. Fire prevention literature is also distributed.

This highway educational work is given through the courtesy of the Department of

Agriculture and the Division of Motor Vehicles, two coordinated State agencies working under the Governor's proclamation.

As the motorist travels the highways and stops at any automobile house for sales, service, repairs or storage, he will see a copy of the Governor's proclamation conspicuously posted and will be reminded of the State campaign against fire by the attendant in charge.

CONSTANT REMINDER

Traveling the highways between automobile houses, the motorist stopping for supply at the service stations will again be reminded of the fire hazard in California this summer and cautioned against causing fire.

The State Chamber of Commerce, cooperating with large oil companies, sponsored this educational work along the highways and distributes fire prevention literature.

On May 26, Superintendent E. Raymond Cato of the California Highway Patrol issued Headquarters General Order No. 113 to all patrol officials wherein patrolmen are instructed to

- (1)—Exercise special vigilance in preventing fire.
- (2)—Apprehend violators of section 384 of the Penal Code.
- (3)—Warn motorists to use ash receptacles.
- (4)—Assist forest officials in establishing lines of communication.
- (5)—Direct traffic in fire emergencies.
- (6)—Caution nonresidents at border checking stations against fire.

Other than transportation facilities, State Forester Pratt points out three ways in which the highways are serving the fire prevention campaign:

1. First line of defense in both fire prevention and fire suppression as outlined by Director Walter E. Garrison of the Department of Public Works.
2. Law enforcement measure as outlined by Superintendent E. Raymond Cato of the Division of Highway Patrol.
3. Established educational centers by coordinated State agencies and cooperative organizations against fire starting.

What the Motorist Should Know

MOTORISTS of California are urged by E. Raymond Cato, Superintendent of the California Highway Patrol, to acquaint themselves with important provisions of the law relative to lights which became effective with the new Motor Vehicle Act August 14.

Outstanding in importance are the new regulations designed to promote greater safety in the transportation of loads that extend beyond the bodies of trucks. Inspector Will R. Sharkey, Jr., head of the Bureau of Lights of the California Highway Patrol, offers the following as explanatory of some of the most important phases of the new law:

Loads projecting four feet or more beyond the rear of a vehicle must display two red lights instead of one that are visible 500 feet to the sides as well as the rear.

DISPLAY RED FLAG

In daytime a red flag or cloth not less than 16 inches square must be used. Officers will have particular instructions to enforce these provisions.

Only white or approved amber-colored lights are permitted on the front of vehicles except the red lights of authorized emergency vehicles and colored lights of clearance lamps and approved signal devices.

All lights displayed from the rear shall be red except the clearance lights and approved signal devices.

Side or parking lamps shall not be lighted at the same time head lamps are burning. Parking lights may not be more than three candlepower, must be of white light and must not glare or dazzle.

WHITE OR GREEN

Vehicles may display running board or "courtesy" lights not greater than three candlepower. White or green are the only colors permissible and they must not glare or be visible except from the side.

Vehicles having a load width in excess of 80 inches shall carry clearance lights on the left side of the vehicle beginning one-half hour after sundown and at all times when there is not clear visibility for 200 feet. They must be blue, located at the front and rear with a visibility of 500 feet, and showing to the side as well as to the front or rear.

CALIFORNIA'S already extremely liberal policies toward the out-of-state motorists have been broadened and expanded materially by the new Motor Vehicle Act.

The new law, in many instances, practically doubles the time the nonresident may drive in California without paying for a California license.

Under the old legislation drivers of out-of-state cars could operate for a period of six months in California without taking out a license if such six months period did not extend beyond the end of the calendar year.

The new law changes this, by permitting the out-of-state driver to operate his car as long as the plates he is displaying are good in the state from whence he came.

Thus a motorist arriving here in January from New York with plates issued to him in his home state for that year, will be able to operate in California until the following January without getting new plates. This privilege is extended to all who secure a visitor's permit within five days after arrival.

This amendment, it is believed, will encourage more tourists to come to California.

Under the old law, the owner of out-of-state vehicle used for commercial purposes was required to obtain a California license immediately. This is changed under the new law to permit him to take out short-term licenses for 30, 60 or 90 days by paying a proportionate part of the regular annual fee.

This change is of decided benefit to the owner of a truck or other commercial vehicle who enters the State for short periods.

Registration certificates issued to the owner of the out-of-state car must be of a distinctive color and different from the colors issued for California cars. These will be blue for certificates of registration and golden rod for certificates of ownership.

Business conditions apparently are having little or no effect on California's annual "tourist crop" this season.

Records of the division show visitors' permits had been issued for 39,353 out-of-state cars up to July 1st of this year. It is estimated each car brings an average of three persons to the State.

Highway Bids and Awards for July

CALAVERAS COUNTY—Between 1.4 miles north of Calaveritas Creek and 1.4 miles south of Calaveritas Creek to be surfaced with bituminous treated crushed gravel or stone. About 2.8 miles in length. Dist. X, Rt. 55, Sec. B, C. E. Reed, Tracy, \$13,177; Wm. J. Schmidt, Berkeley, \$12,437; A. Teichert & Son, Inc., Sacramento, \$13,708. Contract awarded to Geo. French, Jr., Stockton, \$11,241.

COLUSA COUNTY—Between 12 miles and 5 miles west of Williams. About 6.6 miles to be surfaced with gravel. Dist. III, Rt. 15, Secs. D & E, Fred W. Nighbert, Bakersfield, \$63,111; Hemstreet & Bell, Marysville, \$64,937; A. Teichert & Son, Inc., Sacramento, \$63,337; Fredrickson & Watson Construction Co. and Fredrickson Bros., Oakland, \$47,550; Granite Construction Co., Ltd., Watsonville, \$67,570; Force Construction Co., Piedmont, \$52,550; Kennedy Construction Co., Oakland, \$59,031; C. W. Wood, Stockton, \$44,950. Contract awarded to Capital Construction Co., Sacramento, \$39,997.

EL DORADO COUNTY—Between Riverton and Kyburz. About 8.6 miles to be surfaced with bituminous treated crushed gravel or stone (road mixed). Dist. III, Rt. 11, Sec. G, C. E. Reed, Tracy, \$39,098; Hemstreet & Bell, Marysville, \$41,474; Harold Smith, St. Helena, \$38,409; A. Teichert & Son, Inc., Sacramento, \$41,990; F. W. Nighbert, Bakersfield, \$46,785. Contract awarded to Tiffany, McTeynolds & Tiffany, San Jose, \$33,792.

EL DORADO COUNTY—Between Mays and Nevada State line. About 5.2 miles to be surfaced with bituminous treated selected surfacing and between Ray View Rest and one mile north of Eagle Falls. About 1.8 miles existing surfacing to be bituminous treated. Dist. III, Rts. 11, 38, Secs. K & B, Hemstreet & Bell, Marysville, \$46,450; Basalt Rock Co., Inc., Napa, \$42,423; Fred W. Nighbert, Bakersfield, \$41,968. Contract awarded to Force Construction Co., Piedmont, \$37,157.

IMPERIAL COUNTY—Between Dixteland and Holtville and between El Centro and 4 miles west of Westmoreland. About 43.2 miles of oil treated crushed gravel or stone borders to be constructed. Dist. VIII, Rts. 12, 27, 26, Secs. C, F, G, H & A, Oswald Bros., Los Angeles, \$160,892; Steele Finley, Santa Ana, \$141,912; Griffith Co., Los Angeles, \$150,356; Southwest Paving Co., Los Angeles, \$158,652; George Herz & Co., San Bernardino, \$138,137; Fred W. Nighbert, Bakersfield, \$162,765. Contract awarded to R. E. Hazard Construction Co., San Diego, \$135,587.

KERN COUNTY—Between Democrat Springs and Weldon. About 30.6 miles to be treated with heavy fuel oil. Dist. VI, Rt. 57, Secs. H & I, Square Oil Co., Inc., Los Angeles, \$23,371; G. W. Ellis, Los Angeles, \$12,236; P. J. Akmadzich, Los Angeles, \$11,660; Valley Paving and Construction Co., Fresno, \$11,532; Crane Service Co., Los Angeles, \$11,236; Fred W. Nighbert, Bakersfield, \$13,144. Contract awarded to Oilfields Trucking Co., Ltd., Taft, \$9,879.

LASSEN COUNTY—Between Doyle and Long Valley Creek. About 7.5 miles to be oiled, about 4.3 miles to be surfaced with selected material. Dist. II, Rt. 29, Secs. D & E, C. A. Ladeveze, Los Angeles, \$29,455; Basalt Rock Co., Inc., Napa, \$21,642; Geo. French, Jr., Stockton, \$21,503. Contract awarded to Capital Construction Co., Sacramento, \$18,057.

LOS ANGELES COUNTY—Between Piru Creek and Gorman. About 12.5 miles to be graded. Dist. VII, Rt. 4, Secs. I & J, George Pollock Co., Sacramento, \$557,614; Von der Heller & Pierson, Castaic, \$506,434; Gibbons & Reed Company, Burbank, \$629,065; H. W. Rohl Company, Los Angeles, \$503,975; Grantfield, Farrar & Carlin, San Francisco, \$515,558; Healy, Tibbitts Construction Co., San Francisco, \$541,401; Long Transportation Co., Los Angeles, \$520,404. Contract awarded to Morrison-Knudsen Co. and Macdonald & Kahn, San Francisco, \$459,772.

MADERA COUNTY—Steel stringer bridge across Fresno River at Madera. Consisting of 10-41'-0" and 2-40' 9" spans on steel pile bents. Dist. VI, Rt. 4, Sec. D, Peter McHugh, San Francisco, \$45,540; Fredrickson & Watson Construction Co. and Fredrickson Bros., Oakland, \$40,694; J. S. Metzger & Son, Los Angeles, \$37,816; Merritt-Chapman & Scott Corp., San Pedro, \$42,368; A. W. Kitchen, San Francisco, \$38,866;

Gist & Bell, Arcadia, \$44,465; M. B. McGowan, San Francisco, \$39,757. Contract awarded to Gutleben Bros., Oakland, \$37,790.

MARIN AND SONOMA COUNTIES—Repair bridge across Petaluma Creek at Green Point. Replace floor on bascule span and repairs. Repairs and additions to operating equipment. Dist. IV, Rt. 8, Sec. A, Butte Construction Co., San Francisco, \$20,789; Healy, Tibbitts Construction Co., San Francisco, \$21,347; The Duncanson Harrelson Co., San Francisco, \$24,726. Contract awarded to Gutleben Bros., Oakland, \$19,828.

MARIPOSA COUNTY—Between Orange Hill School and Pain Flat. About 7.4 miles to be graded. Dist. VI, Rt. 18, Secs. A, I & J, McCray Co., Los Angeles, \$103,043; Kennedy Construction Co., Oakland, \$118,285; Force Construction Co., Piedmont, \$109,178; Robinson-Roberts Co., Los Angeles, \$112,895; L. W. Hesse, Merced, \$142,768; Contoules Construction Co., San Francisco, \$99,101; Triangle Rock and Gravel Co., San Bernardino, \$94,703; Gist & Bell, Arcadia, \$126,280. Contract awarded to Fredrickson & Watson Construction Co. and Fredrickson Bros., Oakland, \$91,311.

MONTEREY COUNTY—Reinforced concrete bridge across Granite Creek, about 14 miles south of Monterey. One 127' open spandrel arch span; two girder spans each 44' long, two girder spans each 36' long. Dist. V, Rt. 56, Sec. H, Gutleben Bros., Oakland, \$35,146; Bodenhamer Construction Co., Oakland, \$40,179; Rocca & Calelli, San Rafael, \$40,387; R. B. McKenzie, Red Bluff, \$42,000; M. B. McGowan, San Francisco, \$40,446; Fred J. Maurer & Son, Inc., Eureka, \$39,677; Oberg Bros., Los Angeles, \$35,970; Hanrahan Co., San Francisco, \$35,308. Contract awarded to George J. Ulrich Construction Co., Modesto, \$33,705.

NEVADA COUNTY—Between westerly boundary and Toll House. About 2.9 miles to be graded and surfaced with untreated crushed gravel or stone. Dist. III, Rt. 15, Sec. A, Fredrickson & Watson Construction Co. and Fredrickson Bros., Oakland, \$114,487; Force Construction Co., Piedmont, \$97,487; Frank C. Cuffe, San Rafael, \$63,027; Kennedy Construction Co., Oakland, \$95,987. Contract awarded to Hemstreet & Bell, Marysville, \$96,762.

PLACER COUNTY—Between Colfax and Gold Run. About 9.1 miles to be surfaced with bituminous treated crushed gravel or stone (plant mixed). Dist. III, Rt. 37, Secs. B & C, Healy, Tibbitts Construction Co., San Francisco, \$101,310; Clark & Henry Construction Co., San Francisco, \$109,740; Hemstreet & Bell, Marysville, \$117,234; W. H. Hauser, Oakland, \$115,308; A. Teichert & Son, Inc., Sacramento, \$127,033. Contract awarded to Southwest Paving Co., Los Angeles, \$90,675.

RIVERSIDE COUNTY—Widen existing multiple span arch bridge across Santa Ana River near Riverside. Two 95' 0" spans, two 102' 0" and one 106' 0" spans on concrete piers and abutments with pile foundations. Dist. VIII, Rt. 19, Sec. A, Bodenhamer Construction Co., Oakland, \$120,920; Merritt, Chapman & Scott, San Pedro, \$123,031; R. H. Travers, Los Angeles, \$150,928; Matich Bros., Elsinore, \$116,096; Robinson, Roberts Co., Los Angeles, \$125,603; Oberg Bros., Los Angeles, \$116,833; Owl Truck Co., Inc., Compton, \$125,373; Lynch-Cannon Engineering Co., Los Angeles, \$128,649. Contract awarded to Byerts & Dunn, Los Angeles, \$105,865.

SAN BERNARDINO COUNTY—Between 6 miles west of Baker and Halloran Summit. About 23.7 miles to be graded and surfaced with oil treated crushed gravel or stone. Dist. VIII, Rt. 31, Secs. K, L, M, Peninsula Paving Co. San Francisco, \$419,488; Gibbons & Reed Co., Burbank, \$415,955; Lang Transportation Co., Los Angeles, \$444,007; Southwest Paving Co., Los Angeles, \$423,962; Healy, Tibbitts Construction Co., San Francisco, \$462,749; Chas. U. Heuser, Glendale, \$410,065; George Herz & Co., San Bernardino, \$390,840; New Mexico Construction Co., Inc., Albuquerque, New Mexico, \$462,029; Morrison-Knudsen Co., Idaho, \$395,086; McCray Co., Los Angeles, \$406,231; Isbell Construction Co., Carson City, Nevada, \$494,487. Contract awarded to H. W. Rohl Co., Los Angeles, \$363,869.

SAN BERNARDINO COUNTY—Between Anderson St. and city limits of Redlands. About 3.48 miles. Fuel oil to be applied to the shoulders. Dist. VIII, Rt. 26,

National Analysis Shows Latest Auto Laws Vary in U. S.

A NATION-WIDE analysis of motor vehicle laws, including those passed at recent sessions of legislatures in forty-four states, should prove of intense interest to autoists and pedestrians as well.

Speed laws vary all the way from fifty miles an hour in North Dakota to the twenty-five mile prima facie limit in Missouri. Fourteen states, namely, Connecticut, Florida, Indiana, Iowa, Kansas, Maine, Michigan, Montana, Nevada, Oregon, Tennessee, Vermont, Wisconsin and Wyoming, have discarded the fixed speed limit and stipulate a rate of speed that is "reasonable and proper" in view of traffic conditions or that permits stopping within "the clear distance ahead."

RIGHT OF WAY

Concerning right of way, in general, vehicles approaching from the right have priority. Idaho, however, gives the right of way to cars on state highways.

Overtaking on hills or curves where view is obstructed is specifically prohibited in thirty-three states and the District of Columbia. In many states, no other act of carelessness brings more prompt action from state highway police.

STOP AT TRACKS

Ten states, namely, Alabama, Arkansas, Delaware, Florida, Georgia, Illinois, Louisiana, Mississippi, Pennsylvania and Tennessee, require a full stop before crossing railroad tracks, while six additional states and the District of Columbia require a full stop where special stop signs are erected.

Parking on the main traveled portion of the highway is a violation of the state code in a majority of cases, while in states where such parking is not definitely prohibited, it is required that fifteen feet of roadway be left clear.

MUST DIM LIGHTS

Regarding lighting, the law of fifteen states, namely, Arizona, Arkansas, Colorado, Florida, Illinois, Indiana, Kansas, Michigan, Montana, Nebraska, New Hampshire, New Mexico, North Dakota, Ohio and Oregon, requires that lights be dimmed when approaching vehicles. Oregon requires dimming of lights on wet pavements. Spotlights are prohibited in Kansas, North Carolina, Oklahoma, Wisconsin and in the cities of Missouri.

ROADS RULE THE WORLD; PRIESTS OF PROSPERITY

Good highways have been subject matter of many eulogies in the form of speeches, articles, engineers' reports, and books, but the finest and most concise tribute noted recently is credited to an Englishman whose name is unknown. He says:

Roads rule the world—not kings, nor courts, nor constables; not ships, nor soldiers. The road is the only royal line in a democracy, the only legislature that never changes, the only court that never sleeps, the only army that never quits, the first aid to the redemption of any nation, the exodus from stagnation in any society, the call from savagery in any tribe, the high priest of prosperity after the order of Melchisedec, without beginning of days or end of life.

The road is umpire in every war, and when the map is made it simply pushes on its great campaign of help, hope, brotherhood, efficiency and peace.

HIGHWAY BIDS AND AWARDS

Continued from Page 41

Sec. A, Square Oil Co., Los Angeles, \$956; California Road Oil Service Co., Wilmington, \$1,034; Pacific Tank Lines, Inc., Los Angeles, \$1,050; Gilmore Oil Co., Ltd., Los Angeles, \$1,159; California Crane Service, Los Angeles, \$1,167. Contract awarded to The Petrol Corporation, Los Angeles, \$300.

SAN DIEGO COUNTY—Between La Mesa and La Posta Creek. About 33.9 miles. Furnish and apply heavy fuel oil on each side of existing pavement. Dist. VII, Rt. 12, Secs. A, B, C, D & F, Oilfields Trucking Co., Ltd., Taft, \$18,297; Gilmore Oil Co., Ltd., Los Angeles, \$16,964; Pacific Tank Lines, Inc., Los Angeles, \$14,149. Contract awarded to Square Oil Co., Inc., Los Angeles, \$10,297.

SAN JOAQUIN COUNTY—About 0.3 miles near Ripon to be graded and paved with Portland concrete cement. Dist. X, Rt. 4, Sec. A, Pacific Construction Co., Oakland, \$13,975. Contract awarded to N. M. Ball, Porterville, \$10,922.

SANTA CLARA COUNTY—Between Coyote Creek and San Jose. About 1.4 miles long to be graded and paved with Portland cement concrete and asphalt concrete. Dist. IV, Rt. 5, Sec. A, Valley Paving and Construction Co., Fresno, \$62,679; Peninsula Paving Co., San Francisco, \$71,631; A. J. Ralsch, San Jose, \$76,041. Contract awarded to Union Paving Co., San Francisco, \$62,426.

SANTA CLARA COUNTY—Reinforce concrete girder bridge across Coyote Creek at San Jose. Consists of 6 spans 34' long on concrete pile bents and concrete abutments and wing walls on pile foundations. Dist. IV, Rt. 5, Sec. A, Bodenhamer Construction Co., Oakland, \$37,178; Oberg Bros., Los Angeles, \$36,291; Healy, Tibbitts Construction Co., San Francisco, \$39,234; M. B. McGowan, San Francisco, \$38,214; A. W. Kitchen, San Francisco, \$37,181; Neves & Harp, Santa Clara, \$32,977; Rocca & Calletti, San Rafael, \$41,798; Peter McHugh, San Francisco, \$37,795; John Doyle, San Jose, \$38,963. Contract awarded to A. J. Ralsch, San Jose, \$31,271.

SHASTA COUNTY—Across Seamans Gulch, about 23 miles east of Redding. 22 19' spans on frame bents with concrete pedestals. Dist. II, Rt. 28, Sec. A, Rolla Arbuckle, Anderson, \$21,402; J. P. Brennan, Redding, \$21,955; R. E. McKenzie, Red Bluff, \$19,378; Fred J. Maurer & Son, Inc., Eureka, \$20,773; John Berlinger, Orland, \$16,531; J. W. Hoopes, Sacramento, \$20,646; B. B. Boyd, San Diego, \$21,505; M. A. Jenkins, Sacramento, \$20,596. Contract awarded to Rufus J. Bean, Clipper Mills, \$15,358.

SUTTER COUNTY—Near the County Hospital. 0.3 miles to be graded and paved with asphalt concrete. Dist. III, Rt. 3, Sec. A, Hemstreet & Bell, Marysville, \$7,584. Contract awarded to Jones & Kin, Hayward, \$6,247.

July Water Applications and Permits

Permits to appropriate water issued by the Department of Public Works, Division of Water Resources, during the month of July, 1931.

HUMBOLDT AND TRINITY COUNTIES—Permit 3740, Application 6560. Trinity Loop Mining Company, Berkeley, Calif., July 7, 1931, for 150 c.f.s. from ten creeks in Secs. 22, 25, 27 and 34, T. 7 N., R. 6 E., H. B. M., and Secs. 4 and 9, T. 6 N., R. 6 E., H. B. M., for mining and domestic purposes. Estimated cost \$150,000.

LOS ANGELES COUNTY—Permit 3741, Application 6907. U. S. Angeles National Forest, Los Angeles, Calif., July 13, 1931, for 1300 gallons per day from Camp Spring in Sec. 13, T. 7 N., R. 16 W., S. B. M., for domestic purposes. Estimated cost \$100.

LOS ANGELES COUNTY—Permit 3742, Application 6908. U. S. Angeles National Forest, Los Angeles, Calif., July 13, 1931, for 1300 gallons per day from Ranger Spring in Sec. 18, T. 7 N., R. 15 W., S. B. M., for domestic purposes. Estimated cost \$50.

SAN DIEGO COUNTY—Permit 3743, Application 6928. V. I. Edwards, San Diego, Calif., July 13, 1931, for 0.25 c.f.s. from Beaver Creek in Sec. 25, T. 16 S., R. 1 E., S. B. M., for irrigation and domestic purposes. Estimated cost \$1,000.

MODOC COUNTY—Permit 3744, Application 6858. Thomas A. Somma, Canby, Calif., July 14, 1931, for 13,000 gallons per day from an unnamed stream in Sec. 9, T. 41 N., R. 9 E., M. D. M., for irrigation and domestic purposes.

MONO COUNTY—Permit 3745, Application 6773. Alice F. Hunewill, Bridgeport, Calif., July 16, 1931, for 200 gallons per day from an unnamed stream in Sec. 5, T. 3 N., R. 24 E., M. D. M., for domestic purposes. Estimated cost \$150.

EL DORADO COUNTY—Permit 3746, Application 6801. Frank La Montague et al., Antioch, Calif., July 16, 1931, for 600 gallons per day from an unnamed spring in Sec. 29, T. 11 N., R. 16 E., M. D. M., for domestic purposes. Estimated cost \$30.

MONTEREY COUNTY—Permit 3747, Application 6837. Henrietta T. Austin, Salinas, Calif., July 17, 1931, for .075 c.f.s. from an unnamed stream in Sec. 2, T. 17 S., R. 2 E., M. D. M., for irrigation and domestic use on four acres.

TRINITY COUNTY—Permit 3748, Application 6788. Charles H. Miller, Chico, Calif., July 17, 1931, for 150 gallons per day from an unnamed spring in Sec. 19, T. 1 S., R. 8 E., H. B. M., for domestic purposes. Estimated cost \$600.

TUOLUMNE COUNTY—Permit 3749, Application 6799. Oakland-Piedmont Council, Boy Scouts, Oakland, Calif., July 17, 1931, for 15,000 gallons per day from Middle Fork of Tuolumne River in Sec. 15, T. 1 S., R. 19 E., M. D. M., for domestic purposes. Estimated cost \$1,500.

SAN JOAQUIN COUNTY—Permit 3750, Application 6612. F. J. Dietrich et al., Stockton, Calif., July 21, 1931, for 1.44 c.f.s. from Calaveras River in Sec. 5, T. 2 N., R. 9 E., M. D. M., for irrigation use on 115.46 acres.

SAN JOAQUIN COUNTY—Permit 3751, Application 6623. L. F. Grimsley et al., Stockton, Calif., July 21, 1931, for 2.56 c.f.s. from Calaveras River in Sec. 4, T. 2 N., R. 9 E., M. D. M., for irrigation use on 204.69 acres.

SAN JOAQUIN COUNTY—Permit 3752, Application 6624. Ray and T. & C. H. McGurk, Stockton, Calif., July 21, 1931, for 2.94 c.f.s. from Calaveras River in Section 33, T. 3 N., R. 9 E., M. D. M., for irrigation use on 233 acres. Estimated cost \$3,000.

MONO COUNTY—Permit 3753, Application 6833. O. P. Dyar, Pasadena, Calif., July 21, 1931, for 150 gallons per day from an unnamed stream in Sec. 17, T. 4 S., R. 27 E., M. D. M., for domestic purposes. Estimated cost \$50.

EL DORADO COUNTY—Permit 3754, Application 6898. United States El Dorado National Forest, Placerville, Calif., July 30, 1931, for 800 gallons per day from an unnamed spring in Sec. 21, T. 13 N., R. 17 E., M. D. M., for domestic and fire protection purposes. Estimated cost \$100.

EL DORADO COUNTY—Permit 3755, Application 6899. United States El Dorado National Forest, Placerville, Calif., July 30, 1931, for 800 gallons per day from Doane Springs in Sec. 2, T. 11 N., R. 17 E., M. D. M., for domestic purposes. Estimated cost \$150.

EL DORADO COUNTY—Permit 3756, Application 6900. United States El Dorado National Forest, Placerville, Calif., July 30, 1931, for 3200 gallons per day from Bryant Creek in Sec. 15, T. 11 N., R. 17 E., M. D. M., for domestic and fire protection purposes. Estimated cost \$500.

EL DORADO COUNTY—Permit 3757, Application 6903. United States El Dorado National Forest, Placerville, Calif., July 30, 1931, for 3000 gallons per day from Granite Lake Creek in Sec. 28, T. 13 N., R. 17 E., M. D. M., for domestic and fire protection purposes. Estimated cost \$450.

HUMBOLDT COUNTY—Permit 3758, Application 6796. Division of Highways, Sacramento, Calif., July 30, 1931, for 970 gallons per day from an unnamed spring in Sec. 28, T. 2 S., R. 3 E., H. B. M., for recreational purposes. Estimated cost \$250.

PLUMAS COUNTY—Permit 3759, Application 6950. C. E. McGrath and R. L. Morgan, Greenville, Calif., July 31, 1931, for 2 c.f.s. from Echo Creek in Sec. 35, T. 26 N., R. 8 E., M. D. M., for mining and domestic purposes.

Applications for permits to appropriate water filed with the Department of Public Works, Division of Water Resources, during the month of July, 1931.

SAN DIEGO COUNTY—Application 6983. Hector Abdelnour, Spring Valley, Calif., for 900 gallons per day from an unnamed spring tributary to Cottonwood Creek watershed. To be diverted in Sec. 1, T. 17 S., R. 2 E., S. B. B. and M., for domestic purposes.

MONTEREY COUNTY—Application 6990. John C. Evans, San Simeon, Calif., for 0.02 c.f.s. from an unnamed spring tributary to Pacific Ocean. To be diverted in Sec. 5, T. 24 S., R. 5 E., M. D. B. and M., for domestic purposes.

MONTEREY COUNTY—Application 6991. John C. Evans, San Simeon, Calif., for 0.01 c.f.s. from an unnamed spring tributary to Pacific Ocean. To be diverted in Sec. 32, T. 23 S., R. 5 E., M. D. B. and M., for domestic purposes. Estimated cost \$200.

EL DORADO COUNTY—Application 6992. E. S. Wilson, A. V. Wilde, Don Atterbury, Mary McMahon, V. J. Sincok, A. M. Clegghorn, R. M. Beilby and A. J. Deller, c/o E. S. Wilson, Box 513, Davis, Calif., for 1600 gallons per day from Rocky Canyon tributary to South Fork of American River. To be diverted in Sec. 18, T. 11 N., R. 17 E., M. D. B. and M., for domestic purposes.

LOS ANGELES COUNTY—Application 6993. James H. Robert, 1357 W. 38th Pl., Los Angeles, Calif., for 0.05 c.f.s. and 5 ac. ft. per annum from Dume Creek tributary to Pacific Ocean. To be diverted in Sec. 13, T. 1 S., R. 19 W., S. B. B. and M., for domestic purposes. Estimated cost \$1,500.

MONO COUNTY—Application 6994. R. W. Brown, Box 402, Oceanside, Calif., for 150 gallons per day from Rock Creek tributary to Owens River. To be diverted in Sec. 33, T. 4 S., R. 30 E., M. D. B. and M., for domestic purposes. Estimated cost \$100.

MONTEREY COUNTY—Application 6995. E. J. and Gertrude Bowles, 1127 Broad St., San Luis Obispo, Calif., for 200 ac. ft. per annum from an unnamed spring tributary to Pacific Ocean. To be diverted in Sec. 32, T. 23 S., R. 5 E., M. D. B. and M., for domestic purposes. Estimated cost \$150.

PLUMAS COUNTY—Application 6996. William Rutherford, R. F. Gilbride, E. A. Murray, Dewey Baker, G. E. Wotten, J. L. Boitano, L. E. Barr and H. F. Frye, c/o William Rutherford, P. O. Box 288, Sacramento, Calif., for 0.1 c.f.s. and 9 ac. ft. per annum from an unnamed stream tributary to Willow Creek, thence Middle Fork of Feather River. To be diverted in Sec. 15, T. 23 N., R. 7 E., M. D. B. and M., for mining and domestic purposes.

EL DORADO COUNTY—Application 6997. W. H. Welch, Kyburz (forward to Twin Bridges, c/o Spen-

Applications and Permits Granted

(Continued from Preceding Page)

cer's Store), Calif., for 8 c.f.s. from Pyramid Creek tributary to South Fork of American River. To be diverted in Sec. 8, T. 11 N., R. 17 E., M. D. B. and M., for power and domestic purposes (9 h.p.). Estimated cost \$100.

CALAVERAS COUNTY—Application 6998. Giacomo Oneto, c/o Charles P. Snyder, Atty., San Andreas, for 0.05 c.f.s. from an unnamed spring tributary to North Fork of Tuolumne River. To be diverted in Sec. 23, T. 7 N., R. 17 E., M. D. B. and M., for domestic purposes.

EL DORADO COUNTY—Application 6999. R. P. Easley, W. A. Christiansen and A. F. Bray, c/o R. P. Easley, 509 G St., Antioch, Calif., for 1200 gallons per day from a stream tributary to South Fork American River. To be diverted in Sec. 24, T. 11 N., R. 16 E., M. D. B. and M., for domestic purposes.

INYO COUNTY—Application 7000. E. Hague and M. A. Streger, Box 444, Trona, Calif., for 1 miner's inch from Redlands Spring. To be diverted in Sec. 18, T. 23 S., R. 45 E., M. D. B. and M., for mining and domestic purposes. Estimated cost \$2,000.

SIERRA COUNTY—Application 7001. John J. Connell, c/o R. F. Taylor, Downieville, Calif., for 0.1 c.f.s. from Swansea Tunnel tributary to Swansea Ravine and Middle Fork Yuba River. To be diverted in Sec. 3, T. 18 N., R. 10 E., M. D. B. and M., for mining and domestic purposes. Estimated cost \$200.

SAN DIEGO COUNTY—Application 7002. South Coast Land Company, a Corporation, c/o George O. Bauwens, Engineer, 412 Pacific Southwest Building, Long Beach, Calif., for 0.75 c.f.s. and 8 ac. ft. per annum from unnamed creek (sometimes called Fry Creek) tributary to San Luis Rey River. To be diverted in Sec. 32, T. 9 S., R. 1 W., S. B. B. and M., for irrigation and domestic purposes (63 acres). Estimated cost \$500.

PLUMAS COUNTY—Application 7003. J. B. Higgins, Quincy, Calif., for 8 c.f.s. from Blackhawk Creek tributary to Spanish Creek, thence Indian Creek and North Fork of Feather River. To be diverted in Sec. 27, T. 25 N., R. 9 E., M. D. B. and M., for mining purposes. Estimated cost \$1,000.

SISKIYOU COUNTY—Application 7004. Carl-David Mining Company, a Corporation, c/o Tebbe & Tebbe, Atty., Yreka, Calif., for 40 c.f.s. from Jaynes Canyon Creek, Uncle Tom's Cabin Creek, Rock Gulch and Deeo Gulch tributary to West Fork of Beaver Creek. To be diverted in Sec. 5, T. 47 N., R. 9 W., M. D. B. and M., for power and domestic purposes (4545 h.p.).

SAN MATEO COUNTY—Application 7005. Humphrey Estates, Inc., 315 Montgomery St., San Francisco, Calif., for 195 ac. ft. per annum from Green Oaks Creek tributary to Pacific Ocean. To be diverted in Sec. 30, T. 9 S., R. 4 W., M. D. B. and M., for irrigation and stock watering purposes (475 acres). Estimated cost \$2,000.

SONOMA COUNTY—Application 7006. Hacienda, Inc. Hilton, Calif., for (1) 0.037, (2) 0.07, (3) 0.24 c.f.s. and (2) 40,000 gallons per annum from (1) unnamed stream (2) unnamed stream and (3) Russian River tributary to (1) and (2) Russian River and (3) Pacific Ocean. To be diverted in Sec. 1, T. 8 N., R. 10 W., M. D. B. and M., for irrigation and domestic purposes (19 acres).

TRINITY COUNTY—Application 7007. C. L. Brown, 600 S. Madison St., Pasadena, Calif., for 100 c.f.s. from Canyon Creek tributary to Trinity River, thence Klamath River. To be diverted in Sec. 17, T. 35 N., R. 10 W., M. D. B. and M., for mining and domestic purposes. Estimated cost \$150,000.

LOS ANGELES COUNTY—Application 7008. Charles P. Cooke, 1120 Las Palmas Ave., Los Angeles, Calif., for 1 c.f.s. from Piru Creek tributary to Santa Clara River. To be diverted in Sec. 13, T. 6 N., R. 18 W., S. B. B. and M., for industrial purposes (road construction). Estimated cost \$15,000.

SISKIYOU COUNTY—Application 7009. H. J. Barton, Box 517, Yreka, Calif., for (1) 5.0 (2) 8.75 and (3) 1.87 c.f.s. from (1) Jackson Creek, (2) South Fork Scott Creek and (3) Blue Jay Creek tributary to Scott Creek. To be diverted in Sec. (1) 10, T. 39 N., R. 9 W., M. D. B. and M., and Sec. (2 and 3) 34,

T. 40 N., R. 9 W., M. D. B. and M., for mining and domestic purposes.

SAN BERNARDINO COUNTY—Application 7010. H. C. Zech, 116 E. 31st St., Los Angeles, Calif., for 0.025 c.f.s. from unnamed spring tributary to Big Valley Drainage Area. To be diverted in Sec. 81, T. 2 N., R. 2 E., S. B. B. and M., for domestic purposes. Estimated cost \$2,500.

SHASTA COUNTY—Application 7011. State of California, Department of Public Works, Division of Highways, c/o C. H. Purcell, State Highway Engineer, Public Works Bldg., Sacramento, Calif., for 0.025 c.f.s. from unnamed spring tributary to Spring Creek, thence Clear Creek and Sacramento River. To be diverted in Sec. 23, T. 32 N., R. 6 W., M. D. B. and M., for domestic purposes.

MERCED COUNTY—Application 7012. East Side Canal and Irrigation Company, a Corporation, 315 Chancery Bldg., San Francisco, Calif., for 175 c.f.s. from McCoy Spillway, Arena Spillway, Livingston Drain (N., S. and main drain), Bear Creek, Owens Creek, Duck Creek and Deadman Creek tributary to San Joaquin River. To be diverted in Secs. 20, 21, 22, 27 and 30, T. 7 S., R. 11 E., M. D. B. and M.; Sec. 12, T. 8 S., R. 11 E., M. D. B. and M. and Secs 19 and 30, T. 8 S., R. 12 E., M. D. B. and M., for irrigation purposes (49,503.74 acres).

EL DORADO COUNTY—Application 7013. Frank J. Murray and Edw. J. Schoenbacher, c/o Frank J. Murray, 640 36th St., Sacramento, Calif., for 200 gallons per day from Bull Creek tributary to South Fork of American River. To be diverted in Sec. 29, T. 11 N., R. 14 E., M. D. B. and M., for domestic purposes.

INYO COUNTY—Application 7014. John Amick, Independence, Calif., for 0.5 c.f.s. from Barrel Springs tributary to Mazourka Canyon, thence Owens River. To be diverted in Sec. 20, T. 12 S., R. 36 E., M. D. B. & M., for mining purposes. Estimated cost \$800.

KERN COUNTY—Application 7015. Board of Supervisors of Kern County, Bakersfield, Calif., for 0.40 c.f.s. from 2 springs. To be diverted in Sec. 29, T. 25 S., R. 22 E., M. D. B. and M., for domestic purposes.

HUMBOLDT COUNTY—Application 7016. Harry Pinkerton, 934 3d St., Eureka, Calif., for 0.02 c.f.s. from an unnamed stream tributary to Humboldt Bay. To be diverted in Sec. 20, T. 5 N., R. 1 E., H. B. & M., for domestic purposes.

MENDOCINO COUNTY—Application 7017. Frieda Parnett, Box 2, Gualala, Calif., for 100 gallons per day from Sea Side stream tributary to Pacific Ocean. To be diverted in Sec. 21, T. 11 N., R. 15 W., M. D. B. and M., for domestic purposes. Estimated cost \$500.

EL DORADO COUNTY—Application 7018. Mrs. R. M. Fountain, 2901 I St., Sacramento, Calif., for 400 gallons per day from an unnamed stream and spring tributary to South Fork of American River. To be diverted in Sec. 23, T. 11 N., R. 15 E., M. D. B. and M., for domestic purposes. Estimated cost \$50.

EL DORADO COUNTY—Application 7019. E. R. Hickey, G. L. Davenport and L. J. Caldwell, c/o E. R. Hickey, 609 3d St., Woodland, Calif., for 600 gallons per day from an unnamed stream tributary to South Fork of American River. To be diverted in Sec. 19, T. 11 N., R. 16 E., M. D. B. and M., for domestic purposes. Estimated cost \$75.

SAN BERNARDINO COUNTY—Application 7020. Henry W. Muhleisen, 401 W. P. Story Bldg., Los Angeles, Calif., for 0.007 c.f.s. from water developed in tunnel. To be diverted in Sec. 28, T. 8 N., R. 18 E., S. B. B. and M., for mining and domestic purposes. Estimated cost \$500.

SAN DIEGO COUNTY—Application 7021. Karl Feller, Aguanga, Calif., for 0.02 c.f.s. from unnamed spring tributary to Tercecula River. To be diverted in Sec. 12, T. 9 S., R. 1 E., S. B. B. and M., for irrigation and domestic purposes (50 acres). Estimated cost \$250.

FRESNO COUNTY—Application 7022. County of Fresno, c/o Board of Supervisors, Fresno, Calif., for 0.11 c.f.s. from San Joaquin River tributary to Sulsum Bay. To be diverted in Sec. 32, T. 9 S., R. 23 E., M. D. B. & M., for domestic purposes (tubercular sanitarium purposes). Estimated cost \$14,000.

STATE OF CALIFORNIA
Department of Public Works

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FRANK B. DURKEE, General Right of Way Agent

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Port of San Jose—Not appointed

Port of San Diego—Edwin P. Sample



STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

MAP
SHOWING
STATE HIGHWAY SYSTEM

1931

LEGEND
 Primary Roads —————
 Secondary Roads - - - - -

PACIFIC OCEAN