



COLORADO HIGHWAYS BULLETIN ~

June, 1919

Colorado in Her Most Prosperous Year
Auto Line Between National Parks
Colorado Commission Highly Honored
"Little Zeb" and Pike's Peak
Professor Deplores Politics in Road
Work
Bonifaces of Rockies

Issued by the
State Highway Department

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A fine field of corn in Montrose County with an unusually attractive centerpiece.

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Published Monthly
 by the



Colorado Highway
 Department

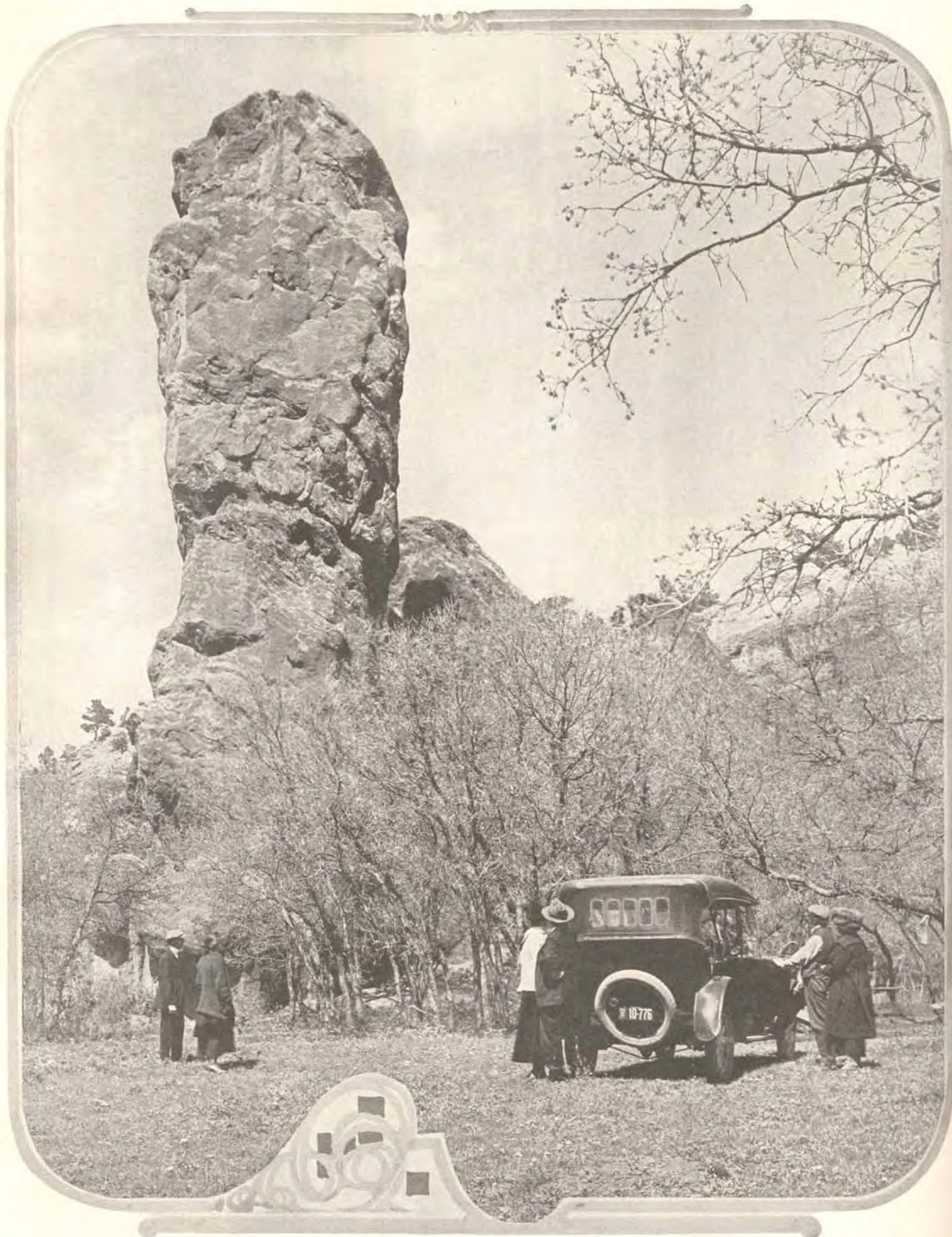
Denver, Colorado.

With the approval of the Colorado State Auditing Board.

Address all communications to Colorado Highway Department,
 attention J. G. Hilliard, editor, Colorado Highways Bulletin.

Owing to the necessarily limited edition of this publication it will be impossible to distribute it free to any persons or institutions other than state and county officials actually engaged in the planning or construction of highways, instructors in highway engineering, newspapers and periodicals and civic associations. Others desiring to obtain Colorado Highways can do so by sending 10 cents for each number desired. Associations desiring to distribute the magazine can obtain it at cost in lots of from 500 copies up.

Subscription Price, \$1.00 per year.



Nature's Sentinel Obelisk in Roxborough Park, Twenty Miles Southwest of Denver.



Colorado Is In Midst of Most Prosperous Year

By Howard D. Sullivan

THE State Immigration Department was called upon a few days ago to give to the Colorado Highways Bulletin some statistics illustrative of general business conditions in Colorado at present, as compared with conditions existing before the United States entered the World War. In the compilation of the figures necessary for making the required comparisons a good many facts were brought out which are of interest, as illustrating the progress and present prosperity of the State of Colorado as a whole.

Agricultural conditions have never been more favorable throughout the State at this season of the year than they are now. Reports on acreage of all crops planted now being received from county assessors indicate that the acreage cultivated this year will be the largest in the history of Colorado. These reports show that a large acreage of raw land is being put into crops for the first time this year, and that most of the land previously cultivated is being cropped. Though no definite data on the acreage of raw land put into crops in 1917 and 1918 is available, it is estimated that at least 200,000 acres that had never been plowed before were broken in response to the government's call for increased production of food and feed crops. Apparently the amount of raw land broken for 1919 crops will be close to 50,000 acres.

The value of all crops grown in Colorado in 1916 was approximately \$91,000,000. Last year the value of all crops was somewhat above \$150,000,000. It is too early to build substantial hopes on what the farm output of the State will be this year, for those who are familiar with our

extremely variable rainfall understand that for the non-irrigated districts much depends upon conditions that prevail after June 1. For the irrigated districts, however, at least fair crops are almost certain, for the snowfall in practically all watersheds of the State was heavy during the winter and early spring, and a good supply of water for irrigation is assured. The rainfall in the non-irrigated districts up to May 20th was generally ample for all requirements, and winter wheat and rye have never been in better condition at this time of the year. The acreage of both crops is the largest in the history of the State, and favorable conditions until harvest would result in a production of winter wheat nearly 2,000,000 bushels greater than the largest production of winter and spring wheat combined for any previous year. The outlook for fruit is especially favorable. The blossom was especially heavy in all fruit-producing districts, and no damage from frost has been reported.

So much for the agricultural outlook. It has never been better, but many discouragements usually await the farmer between the time of planting his crop and harvesting it. If nature smiles upon him this year he will make a new high record for crop production in Colorado.

Perhaps there is no better index to the prosperity of any state than its bank deposits. On December 27, 1916, the total deposits in all banks in the State, according to compilations made in this office from the reports of all state, private and national banks and trust companies, were \$228,154,528.14. On December 31, 1918, total deposits were \$255,887,031.82. These figures do not show

the true increase in the cash resources of the people of Colorado, for between the two dates given they invested more than \$100,000,000 in Liberty Bonds and War Savings Stamps, to help Uncle Sam in his great battle against German militarism and autocracy. A very large amount of this sum was withdrawn from savings and other bank deposits, and much which would have gone into bank deposits was diverted to meet deferred payments on these securities. In addition to these purchases of war securities the people of Colorado, between the dates named, subscribed many millions of dollars to the American Red Cross and all other agencies engaged in war work.

From these figures it may be seen that the people of Colorado had in their banks at the beginning of 1918 more than \$27,000,000 in excess of what they had two years previous and owned more than \$100,000,000 worth of Liberty Bonds. The population of the State is estimated at about 1,030,000. This means that there has been an increase of more than \$25 per capita in bank deposits and an increase of nearly \$100 per capita in cash assets on account of Liberty Bonds, provided there has been no material change in the population. There has, of course, been some increase in population during this period, but it has been comparatively slight, for the reason that about 42,000 Colorado boys entered military service between January 1, 1917, and January 1, 1919, and a comparatively small number of them had returned to their homes on the latter date.

The assessed valuation of all property in Colorado for 1916, as returned by the State Tax Commission, was \$1,211,697,278. The value of all property assessed for 1918 was \$1,424,811,288. This is not an abnormal increase in assessed valuation for the State, yet it shows a healthy state of growth, while it does not represent fully the increases in value of agricultural lands that have been apparent in the past two years. There has been but little variation in the selling prices of city real estate since the United States entered the World War, though a better demand is evident now than has been apparent for some years. Farm lands, however, are commanding higher prices than they have ever commanded before in Colorado, and are selling freely. In some of the non-irrigated districts the increases in the prices of farm lands since the beginning of 1917 have been 100 percent and even more, while there has been rather a general increase in the prices of irrigated land, though the percentage of increase has not been nearly so high as for dry farming land. Dealers in farm lands report that the sales of farm land in eastern Colorado during the last eighteen months have been larger than during any like period for a good many years, the purchasers including many experienced farmers from the states immediately east of Colorado, who have sold their higher priced lands at home and have come to Colorado, where land prices, despite the recent advances, still are much lower than in Nebraska, Kansas, Missouri, Iowa and similarly located states. Sales of land in other sections

of the State have been much heavier than usual during the past two years.

There has been a material increase in the number of live stock in the State since the beginning of 1917, as shown by the estimates compiled by the Bureau of Crop Estimates of the United States Department of Agriculture. For example, the number of stock cattle on farms on January, 1919, was estimated by this authority, 1,361,000, compared with 1,200,000 on January 1, 1917, and the number of milk cattle on the two dates were 254,000 and 237,000 respectively. On the same dates the number of hogs on farms was 406,000 and 352,000. Increases were shown for all other classes of livestock. The prices prevailing for livestock at this time are of course much higher than at the beginning of 1917. Losses of stock, particularly cattle and sheep, have been somewhat heavy since the 1919 estimates were made, due to unfavorable weather conditions in the late winter and early spring and to shortage of feed crops, but the number of stock to be marketed this year will be considerably greater than for 1917. The general conditions of livestock at this time in Colorado is not quite as good as usual for this season of the year, due to the unfavorable weather and shortage of feed above referred to, but pastures are in excellent condition and the outlook for production of feed crops is exceptionally good.

The latest official figures on the manufacturing output of the State were compiled by the Federal Census Bureau for the year 1914. These show that the value of all manufactured goods produced in the State that year was \$136,839,321. There has been a very substantial increase in the volume of manufactured output since that time, and heavy increases in prices. Such data as is available indicates that the total value of all goods manufactured in Colorado in 1918 was approximately \$200,000,000. There has been a slight falling off in manufacturing activity in several lines during the early part of this year, due largely to stoppage of government demand for war materials, but the output of the State this year should be materially greater than that for 1914.

Metal mining is the one industry in which conditions have not been so favorable for a year past as they were for a time before the entry of the United States into the war. This has been due to several causes, among which have been a falling of prices for zinc and lead, shortage of labor in the mining camps, high cost of all materials used in mining, and the fixed value of gold, which has not permitted that metal to share in the general advance in prices that has been enjoyed by nearly all standard commodities. The market for tungsten, molybdenum, and the metals of the radium group has been very unstable for several months, and production of these metals has fallen off materially.

There are, however, indications of a revival in the mining industry in Colorado in the very near future. The rising price of silver has encouraged operators to open up many silver properties that had been closed down for

(Continued to Page 23)



A beauty spot on the Fall River Road in Rocky Mountain National Park.

Automobile Line Between National Parks

Secretary Lane of the Interior Department announced May 16th a plan for stimulating motor touring between three large and popular national parks of the West, which will in his opinion mark the beginning of a new epoch in American travel. This project contemplates the establishment of an automobile line from Denver, Colorado, to and through Rocky Mountain, Yellowstone, and Glacier National Parks, via Boulder and Loveland, Colorado; Cheyenne, Douglas, Casper, Thermopolis, and Cody, Wyoming; and Livingston, Bozeman, Boulder, Townsend, Helena, and Choteau, Montana. Improved road conditions next year will make it possible to change the route so as to include several other important cities in all of the states traversed.

The equipment to be used in this service consists of large new touring cars of seven and ten-passenger capacity. The fleet is to be placed in operation by Mr. H. W.

Child of Helena, Montana, and Mr. Roe Emery of Denver, Colorado, who now operate the transportation lines in Yellowstone, Glacier, and Rocky Mountain National Parks. In succeeding seasons this service will probably be extended to other national parks of the Pacific Northwest, California, and the Southwest.

It is Secretary Lane's belief that the Federal Government ought to actively encourage travel to American health and recreation resorts, regardless of whether or not they are in the great national park system. In other words, he believes that the National Park Service, which is in more than one sense the travel bureau of the Federal Government, ought to perform the same service for the American public that the Swiss, French, and other foreign government travel bureaus accomplish for European resorts. Co-operation to this end between the Interior Department and the United States Railroad Administration

has resulted in a marked stimulation of railroad travel to the national parks, and it is certain that a similar development would follow enlightened co-operation between the Government and associations and individuals who are zealously working to improve motor highways and encourage private automobile travel throughout the country.

Travel to the West by private automobile increased at a tremendous rate prior to the war, and the continued improvement of road conditions on the main highways, especially between the national parks, will result in bringing the private automobile traffic to phenomenal proportions.

Secretary Lane feels that the private motor-car is going to be quite as important a factor in American tourist travel as the railroad facilities. He, however, is encouraging the use of every means to stimulate outdoor living and the enjoyment of our great natural resources for recreation, health and observation, in order that the habit of using these resources may be firmly ingrained in the American people.

To further the plan to link together with a great system of highways the national parks of the western United States, a meeting of the representatives of the commercial clubs and chambers of commerce of the states of Idaho, Utah, California, Washington, Oregon, Montana, Wyoming and Colorado will be called as a result of the meeting in Helena May 23rd of the presidents of Montana commercial clubs and good roads men.

Yellowstone park is the suggested meeting place. Committees will be named to take the matter up with other states and perfect arrangements for calling the meeting.

Fishermen Like Good Roads

Good roads have no finer function in Colorado in summer than to enable enthusiastic Waltons to reach the fishing streams and resorts of the State. From May 25 to October 31, when the fishing season closes, the mountain roads accommodate many ambitious anglers. The fishing has become so popular in Colorado and the State has grown so famous for its trout that State authorities have adopted strenuous measures to preserve the supply of the speckled beauties in its streams.

Retaining ponds in which young trout will be nursed and protected until they are large enough to take care of themselves are to be established in every part of the State, according to Roland G. Parvin, State Game and Fish Commissioner.

This plan, he said, will eliminate the methods of former years of dumping annually into the rivers and creeks millions of fish fry which are not able to survive the battle for existence. According to the Commissioner,



Above—Wilson 3-ton truck wrecked at Maverick Draw Bridge, account narrow bridge and dangerous approach. This bridge is located seven miles east of Naturita on the Rainbow Route, Section 20, State Highways.

Below—Wheel of a Ford Car taken in muddy road three miles west of Naturita, State Highway, Section 20, Rainbow Route.

only five percent of the small fish fry placed in mountain streams live.

“My aim,” he said, “is to establish nursing ponds, so the department may place fingerlings instead of fry in the streams. Statistics show that 85 percent of fingerlings placed in streams survive.”



New bridge across San Juan River which opens the road from Durango, Colo., to Gallup, N. M., connecting with the Santa Fe Trail. An outlet for all of Southern Colorado and one of the most important bridges ever built in the state.

New Work In Western States

During the last few weeks reports from all over the country indicate that waiting for roads is soon to be replaced by actual work. Secretary Houston, of the Department of Agriculture, issued a statement May 2nd in which he said that sentiment was growing throughout the country, even in the newer sections, in favor of more sub-

stantial roads. That this is true is indicated by recent awards for concrete highway construction aggregating about a hundred miles, these being but a few of those reported.

In several other western states there is unusual activity, as well as in Colorado. Some of the principal work about to be undertaken in the West is as follows:

Kansas. Two counties in Kansas have awarded large contracts for concrete highways. Near Wichita, in Sedgwick County, a contract for seven and three-eighths miles of eighteen foot concrete road has been awarded to the Smith-Graham Construction Company of Augusta. Price, \$208,585. The six concrete bridges on the road were awarded to the Missouri Valley Bridge Company of Kansas City. Near Topeka, in Shawnee County, ten miles of eighteen foot concrete road on the Fort to Fort road was awarded in two contracts to Cook & O'Brien and J. O. Patterson & Co., both of Kansas City. The price for the four miles let to Cook & O'Brien was \$137,291, and for the six miles to J. O. Patterson & Co., \$250,330.

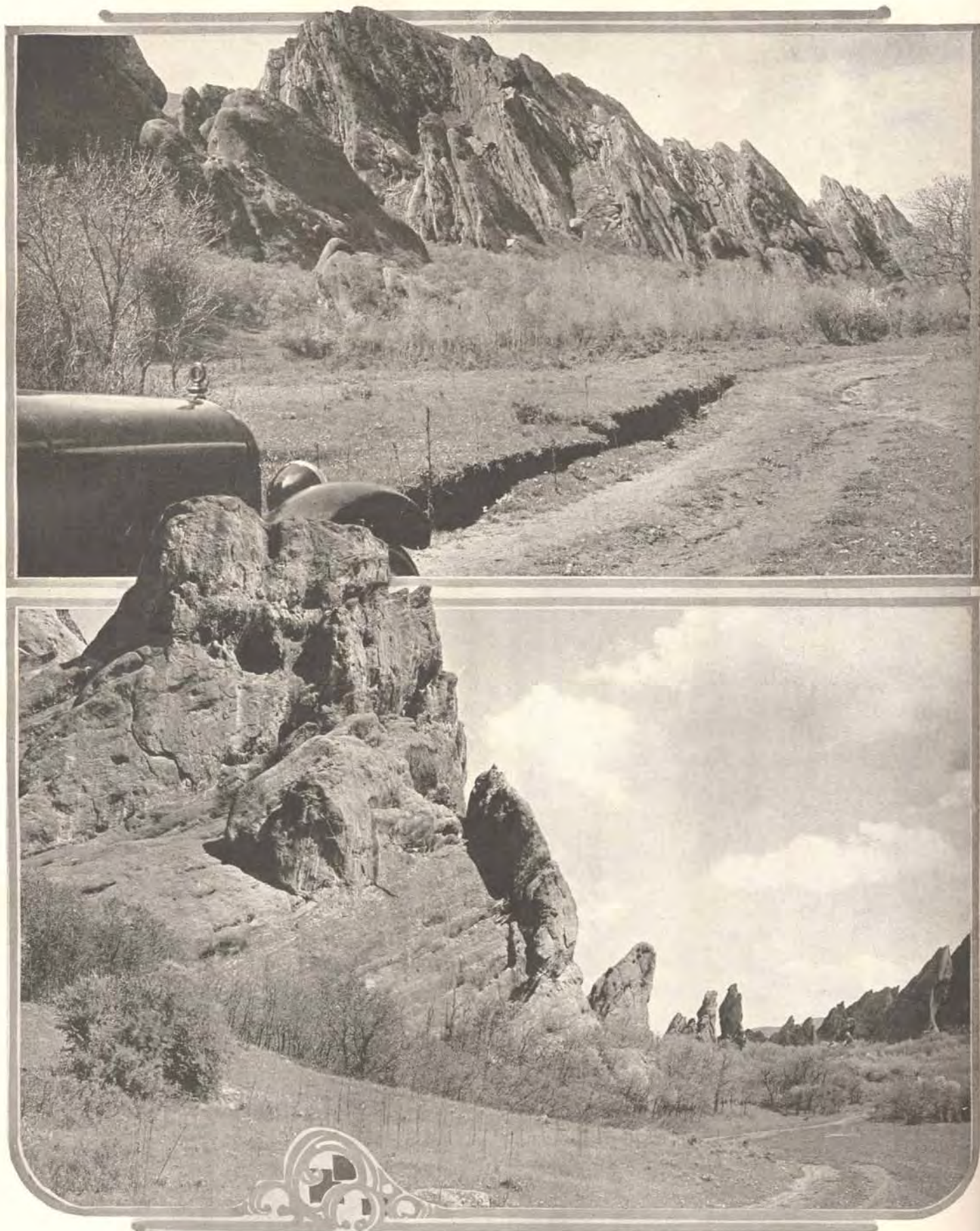
Oklahoma. Tulsa County has commenced work on its \$2,000,000 bond issue project by awarding contracts for about eight miles of 18-foot concrete road to C. O. & H. Frye of Tulsa. This is part of the Ozark Trail. Price, \$2.08 and \$2.35.

Minnesota. Anoka County, Minn., let a contract on March 28th to the Wydell Construction Company, of Mankato, Minn., for 6.6 miles of 18-foot concrete road. The contract price is \$2.03½ per square yard. The pavement will be six inches thick at the sides, eight inches at the center and reenforced. Crush trap rock aggregate will be used. Eleven proposals were received from contractors for this improvement.

California. O. G. Richie of Niles has been awarded a contract by the State Highway Department for 11.4 miles of concrete road that will complete connection of San Diego with the Imperial Valley district. The contract price was \$233,273.

Made Road Records In April

During April, 1919, the Secretary of Agriculture approved project statements for 120 Federal-aid projects, involving the improvement of 923.53 miles of road, at a total estimated cost of \$16,261,326.51. On these roads Federal aid amounting to \$7,538,550.68 was requested. This represents the largest number of project statements approved, the largest total estimated cost and the greatest amount of Federal aid requested during any month since the passage of the Federal-aid road act. The Secretary and the several state highway departments executed 55 project agreements, involving the improvement of 521.51 miles of road, at a total estimated cost of \$4,626,415.48, and on which \$2,039,614.99 Federal aid was requested and set aside in the United States Treasury. In addition, agreements to cover 72 other projects were placed in process of execution during the month.



Two pictures of Roxborough Park, a natural park with formations rivaling the Garden of the Gods and on'y 45 minutes from Denver's Broadway. This park will prove a great magnet for tourists when roads now contemplated are completed.



Sunday motorists parked in a picturesque spot in Platte Canon.

Colorado Commission is Highly Honored



E. E. Sommers

A signal honor was conferred upon Chairman E. E. Sommers of the Colorado State Highway Commission in his appointment by Robert Sterling Yard, Chief of the Educational Section of the National Park Service, to be a member of the National Parks Educational Committee. Mr. Sommers received notice of this new distinction May 3rd. At a meeting in Washington May 22nd this committee resolved itself into The National Parks Association, Mr. Sommers becoming automatically a member of that organization.

Following is the letter from Mr. Yard to Mr. Sommers notifying him of his appointment:

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
WASHINGTON

May 3, 1919.

Dear Mr. Sommers: From what we hear of you in Secretary Lane's office, and what Mr. Albright tells me of your interest in national parks and your influence and popularity through the State, we are anxious to interest you in a nation-wide movement outside of Government to realize the higher uses, chiefly educational, of the national parks.

I invite you to become a member of the National Parks Educational Committee, a list of whose members I enclose. Undoubtedly you know a number of these men. At a meeting in Washington on May 22nd, this Committee will resolve itself into the National Parks Association. By joining the Committee now you will become one of the charter members of the Association, which is what we earnestly wish. It is desirable that Denver

should be importantly represented in the outset of a movement which its projectors feel is destined to nation-wide usefulness and success.

The purpose to use the national parks for a popular educational movement in the natural sciences is not new to us in Government, but it is an idea which cannot be successfully carried out under Government as Congress limits departmental activities to the protection, development, and maintenance of national parks as concrete properties. A year ago, therefore, the Educational Committee, with Dr. Charles D. Walcott, head of the Smithsonian Institution, as Chairman, was organized to study the opportunity.

The investigation of this Committee showed a large field ripe for the working; it showed universities ready for leadership, scientific institutions anxious for popularizing medium, schools greatly interested, motion picture producers anxious for popular suggestions and many other agencies accessible. It remained only to finance an association and go to work. The Committee now feels justified in going forward upon broad nation-wide lines. The National Parks Association is the result. I need not add that the Association will be wholly non-partisan and independent. It will have no connection with Government, but will work in harmony with National Park Service.

Besides its educational work, it will stand for the development of a national park system representative of the best that America has, which means with few exceptions the best in the world. It will work to make the title National Park a national trademark. It will seek earnestly to make our national parks widely known abroad. It will be a militant organization.

If you will accept membership in the Educational Committee, and I earnestly hope you will, kindly write immediately to Henry B. F. Macfarland, Chairman of the Executive Committee, Evans Building, Washington, D. C.

Sincerely,

ROBERT STERLING YARD,
Chief, Educational Section,
National Park Service.



Apple Blossoms on Happy Canon Road, Near Denver.

Mr. Elmer E. Sommers,
State Highway Commission,
Denver, Colorado.

Following is the membership of the National Parks Educational Committee:

National Parks Educational Committee

INDIVIDUALS

Clinton L. Babcock—travel expert,
Belmore Browne—explorer, author, artist,
H. K. Bush-Brown—sculptor,
Allen Chamberlain—journalist,
William Morris Davis—geographer and geologist,
Leonidas Dennis—conservationist,
George B. Dorr—publicist,
Charles W. Eliot—educator,
Frederick Farrington—educator,
Gerit Fort—Assistant Director, U. S. Railroad Administration,
Howard H. Hays—Bureau of Service, National Parks and Monuments, U. S. Railroad Administration.
Emerson Hough—author,
William Kent—Donor Muir Woods—former Congressman,
Henry B. F. Macfarland—publicist,
Marion Randall Parsons—author, mountaineer,
George D. Pratt—Conservation Commissioner State of New York,
Charles D. Sheldon—explorer, author,
Robert Sterling Yard—author, National Park Service,

REPRESENTATIVES OF INSTITUTIONS

Arthur E. Bestor, President, Chautauqua Institution,
J. Walter Fewkes, Chief, Bureau of American Ethnology,
William H. Holmes, Curator National Academy of Art, Head Curator, Anthropology, U. S. National Museum,
William T. Hornaday, Director, New York Zoological Park,
E. O. Hovey, Curator, American Museum of National History,
LaVerne Noyes, President, Board of Trustees, Chicago Academy of Science,
Charles D. Walcott, Secretary, Smithsonian Institution.

REPRESENTATIVES OF SOCIETIES AND ASSOCIATIONS

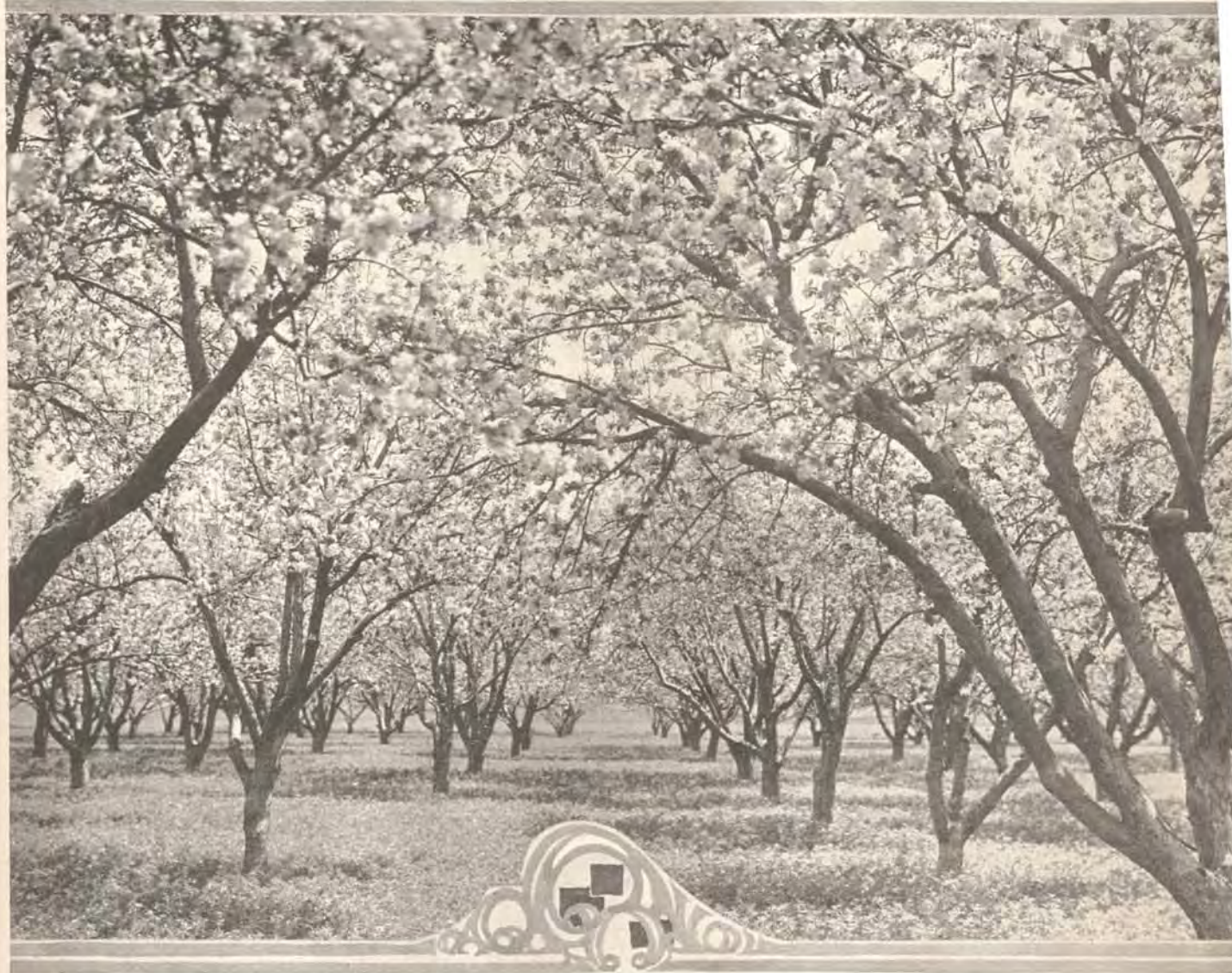
Lorne W. Barclay, Director, Department of Education, Boy Scouts of America,
Henry G. Bryant, Explorer, President, Geographical Society of Philadelphia,
James H. Burnham, President, American Game Protective and Propagation Association,
William E. Colby, President, Sierra Club,
William B. Greeley, Chairman, Conservation Committee, Camp fire Club,

George Bird Grinnell, President, Boone and Crockett Club,
George F. Hubbell, President, Camp Fire Club of America,
Lelia Mechlin, Secretary, American Federation of Art,
J. Horace McFarland, President, American Civic Association,
D. W. Roper, Director, Prairie Club,
Edmund Seymour, President, American Edison Society,
LeRoy Jeffers, Secretary, Associated Mountain Clubs,
T. Gilbert Pearson, Secretary, National Association Audubon Societies,
Edmond S. Meany, President, the Mountaineers,
Charles D. Fay, President, American Alpine Club,
George F. Kunz, President, American Scenic and Historic Preservation Society,
Mrs. John D. Sherman, Conservation Chairman, General Federation of Women's Clubs.

REPRESENTATIVES OF UNIVERSITIES

Alexander Meiklejohn, President, Amherst College,
R. B. Von Kleinsmid, President, University of Arizona,
Benjamin Ide Wheeler, President, University of California,
Clyde A. Duniway, President, Colorado College,
N. M. Lehnerts, Professor of Geology, Columbia University,
Wallace T. Atwood, Professor of Physiography, Harvard University,
Edgar Everett King, Professor of Railway Engineering, University of Illinois,
E. H. Lindley, President, University of Idaho,
David S. Boyd, President, University of New Mexico,
John H. Findley, President, University of State of New York,
Edward K. Graham, President, University of North Carolina,
P. L. Campbell, President, University of Oregon,
John Grier Hibben, President, Princeton University,
Robert L. Slagel, University of South Dakota,
Ray Lyman Wilbur, President, Stanford University,
Robert E. Vinson, President, University of Texas,
Aven Nelson, President, University of Wyoming,
William L. Bryan, President, University of Indiana,
Walter A. Jessup, President, University of Iowa,
Frank A. McVey, President, University of Kentucky,
Marion LeRoy Burton, President, University of Minnesota,
Ellis W. Shuler, Professor of Geology, Southern Methodist University, Texas,
Willis T. Lee, Professor of Geology, University of Oklahoma.

This auxiliary to the federal national parks service has been formed by citizens interested in the work of popularizing and improving the nation's pleasure grounds.



A Denver summer beauty spot—orchard scene near University Park.

In the middle of the war the plan was projected by Mr. Stephen T. Mather, but it has been in abeyance until the public mind was sufficiently released from war's endeavor. The sponsors for the National Parks association are Dr. Charles D. Wolcott of the Smithsonian Institution, William Kent of California, Henry B. Maefarland of Washington and Robert Sterling Yard of the national park service, who were responsible in large measure for the National Parks Educational committee, that has been studying the best means to realize certain uses of the national parks outside of what is being done by governmental agency. Mr. Yard will be in charge of the new organization and will resign from the government to give his sole attention to the work.

The principal objects to be attained by this body are:

1. To interpret the natural sciences which are illustrated in the scenic features, flora and fauna of the national parks and monuments, and circulate popular information concerning them in text and picture.

2. To encourage the popular study of the history, ex-

ploration, tradition and folk lore of the national parks and monuments.

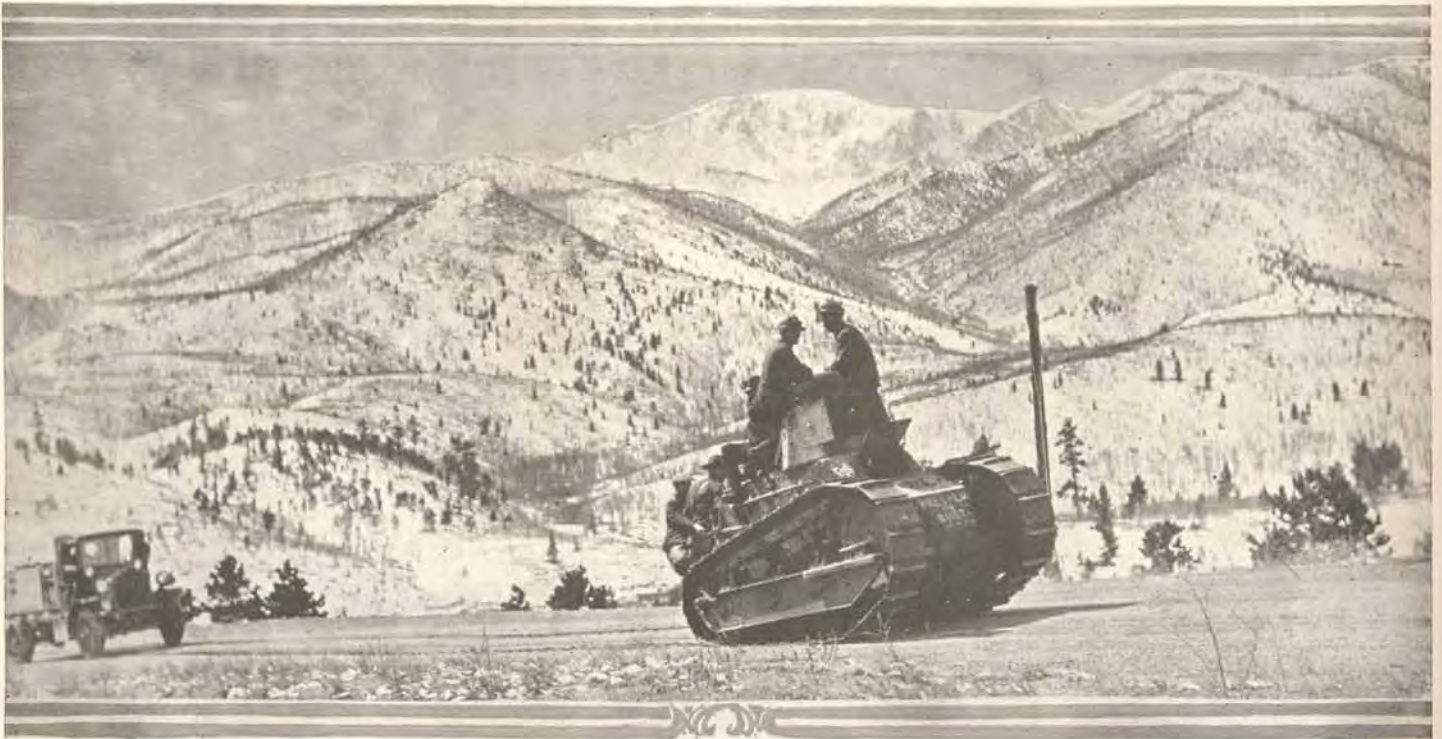
3. To encourage art with national parks subjects, and the literature of national parks travel, wild life and wilderness living, and the interpretation of scenery.

4. To encourage the extension of the national parks system to represent by consistently great examples the full range of American scenery, flora and fauna, yet confined to areas of significance so extraordinary that they shall make the name national park an American trade mark in the competition for the world's travel; and the development of the national monuments into a system illustrative of the range of prehistoric civilization and early exploration and history.

5. To enlist the personal service of individuals and the co-operation of societies, organizations, schools, universities and institutions in the cause of the national parks and monuments.

With such an organization that will be national in the

(Continued to Page 22)



"Little Zeb," battle-scarred war tank, on Victory Loan climb up Pike's Peak. The tank reached an altitude of 11,200 feet, or to within seven miles of the summit, breaking world's records for winter travel.

"Little Zeb" Climbs Part Way Up Pikes Peak

Gay with camouflage, the Stars and Stripes floating proudly from its battle-scarred turret, and "Pikes Peak or Bust" painted on its ugly snout, "Little Zeb," the war tank that essayed to conquer His Majesty Pikes Peak in the interests of the Victory Loan campaign, "Busted" on the tenth mile of its climb to the summit.

Bucking its way through snowbanks 10 feet deep, this little tankster fought as game a fight to the finish against the overwhelming odds as did its namesake, Lieut. Zebulon Pike, over a century ago, and like him, failed to reach the coveted goal.

The climb was made on April 16 and 17 over the Pikes Peak Auto Highway in the Pike National Forest near Colorado Springs. A truck with supplies indicating an Arctic expedition instead of a mountain trip in April followed the tank as far as snow conditions would permit. A special auto bus of newspaper men, photographers, and moving picture operators equipped with sweaters, arctics, trench coats, helmets and sun glasses, trailed the terror of the battle fields to its "death." Four motion picture companies covered the trip, Hearst International, Pathe, Kinograms and the Colorado Springs Chamber of Commerce. W. I. Hutchinson of the District Office represented the Forest Service.

The tank broke down after climbing two of the hardest miles of the highway, within sight of Glen Cove, the half-way point on the road to the summit. Ice and snow that became wedged in the caterpillar traction apparatus caused one of the track plates to break, making a complete renewal

of the part necessary before the tank could be moved. On account of lack of time, and the necessity of keeping up the schedule of visits to other Colorado towns, the trip to the summit was abandoned, and the tank, after being repaired, returned to Colorado Springs.

The hike overland to Glen Cove from the point where the tank broke down never will be forgotten by any members of the baker's dozen that made it. They struggled through snowdrifts, waist deep, loaded down with movie equipment and blankets, until when the Inn at the Cove finally was reached, several members of the party were in an exhausted condition. To the Forest Officer with the party, who had one of the two pairs of snowshoes on the job, fell the "honor" of packing the grub for nine men from the tank to Glen Cove; also the cooking for the party, most of whom were "Tenderfoots."

Work Begins In Poudre Canon

Dooling Brothers, prominent railroad and highway contractors of the West, have been awarded the contract for completion of the Poudre River State road westward from Fort Collins along that historic stream, and began work of grading Monday morning, June 2. The funds for this road, which will be about 30 miles long, are supplied half by the State of Colorado and half by the County of Larimer, \$35,000 in all. The work is being done by the contractors on force account, and is to be completed September 1.



The War Tank making a stiff grade up the motor highway to the summit of Pike's Peak. The Whippet was able to negotiate such drifts without much trouble until the hardening snow broke some of the tractor plates.

State Highway Commissioner Elmer E. Sommers, Harold Schuck of the State Engineering Department and Roe Emery, president of the Rocky Mountain Park Transportation Company, motored over the present Poudre Canon road May 25 and found the contractors about ready to start business. The road will be one of extraordinary beauty. It lies some twenty miles north of the Big Thompson canon road and is practically parallel thereto. At a point about 30 miles west of Fort Collins there will be built a link running southward to connect with the Fall River road, which runs westward from Estes park through Rocky Mountain National park over the Continental Divide to Grand Lake. This link is to be built this fall also.

The geographical and transportational value of such a link as the one projected to connect the Poudre Valley road with the Fall River road is incalculable. It will make Jackson County in northern Colorado, formerly a part of Routt County, with untold riches of both anthracite and bituminous coal, precious metals and stock and agriculture, tributary to Colorado instead of to Wyoming, now its easiest outlet. It will also make that region accessible from Denver and Fort Collins. It will be one of the most valuable roads that could possibly be built in Colorado, both from a commercial and a scenic standpoint.

The "link" road will be built by the Federal Government, which is said to have appropriated \$500,000 for that purpose. The road will not be a long one, but the heaviest sort of work will be encountered on it and it is understood that it will be graded and surfaced in the most perfect manner. It will be the shortest route from Wyoming into the park, and, as Uncle Sam is extremely proud of this, his "baby" park, he is going to make it as easily accessi-

ble as possible, not only to the people of Colorado but to those of other and neighboring states.

The contract for grading and surfacing Federal Aid Project No. 12, in Chaves County, New Mexico, amounting to over \$100,000, has been let to Alfred Olson and L. A. Burnham, of Laverne, Oklahoma.

Funds Are None Too Great

Congress has made available for the current year something like \$80,000,000 for general road work. This is expected to be supplemented by the states to an equal amount. For the three years ending with 1921 a fund of \$275,000,000 from the federal treasury is expected to be available for "postroads." A lot of money this, some may say, and it is very much better than what has gone before. But look what is being done abroad, in countries that had roads that were roads before the war. France, that suffered such ravages from the Hun, is not neglecting her highways and \$152,000,000 has been set aside already for road repair and extension. England has appropriated \$50,000,000.

France has one and three-quarters miles of road for every square mile of area; England, a little over two and one-half miles; the United States three-quarters of a mile. There are 108 French citizens for one mile of road; 239 Englishmen and 42 Americans. We would have to have something like 7,500,000 miles of good roads to equal the ratio of English road mileage. At present we have just a third of that in good, bad and indifferent roadways.



The Big Thompson Road

It may be somewhat of a disappointment to tourists to learn that the road up the Loveland and Big Thompson canons to Estes and Rocky Mountain National parks is not to be rebuilt and double-tracked this season. But when they understand that it will be necessary to close the road entirely to do the necessary widening and surfacing, they will doubtless take a different view of the situation.

Work on the Big Thompson road will begin September 1, and will be completed sometime in November, according to present plans of the Highway Commission. Chief Engineer Maloney has pointed out that it will be a physical impossibility to keep the road open while the heavy work necessary to rebuild it is in progress. Thousands of blasts will have to be fired into the granite walls of the canon to remove the obstructing masses of rock and it would not be safe or even possible to operate the road.

To clinch the resolve of the Highway Commission to defer road construction on the Big Thompson, came delegations from Fort Collins, Longmont, Loveland, Lyons and Boulder, the principal gateways to the Park, requesting that they be permitted ingress to the canon during the summer, for it would be practically impossible for them to reach the famous playgrounds with the Big Thompson closed.

Accordingly, Dooling Brothers, contractors who will do the work on the Big Thompson road, were set at the task of building the Poudre River road, westward from Fort Collins, a much less traveled, though highly important road, June 1. The work on the Poudre will be completed in time to move their equipment to the Big Thompson September 1, when the tourist rush to the parks is practically over.

The wisdom of the Commissioners in keeping the present Big Thompson road open this summer will not be questioned, when it is considered that this is the most heavily traveled road into Estes and Rocky Mountain National parks, and that practically all of northern Colorado is forced, for geographical reasons, to use this route. The people from that part of the State have played no small part in making Rocky Mountain the most popular of all national parks, for this playground, which has been open but four years, received more visitors, even as early as its second year of existence, than any other two national parks in the Nation combined.

Progressive Military Maps

One benefit derived from the war is the mapping of the states under specifications of the War Department, as shown by a sample on the back page of the Bulletin this month, named "Progressive Military Maps." While the work was originally designed for the use of the Army and covers the whole nation, it will be of great use in civil affairs.

Roads are a prime feature in such maps and are of interest in times of peace as well as in war. Nearly all the work in this State has been done by the Highway Commission, though the U. S. Forestry Service is assisting, especially in reports that accompany such maps in the mountain districts.

Advance sheets as per sample, have been prepared throughout eastern Colorado, that is, east of the mountains. They are yet far from complete. A large part of this district has never been surveyed for contours, which will have to be done, and other data obtained before they can be considered complete. But they are valuable as far as they go, and contain all the information available. It is hoped the local officials will assist in making them useful.

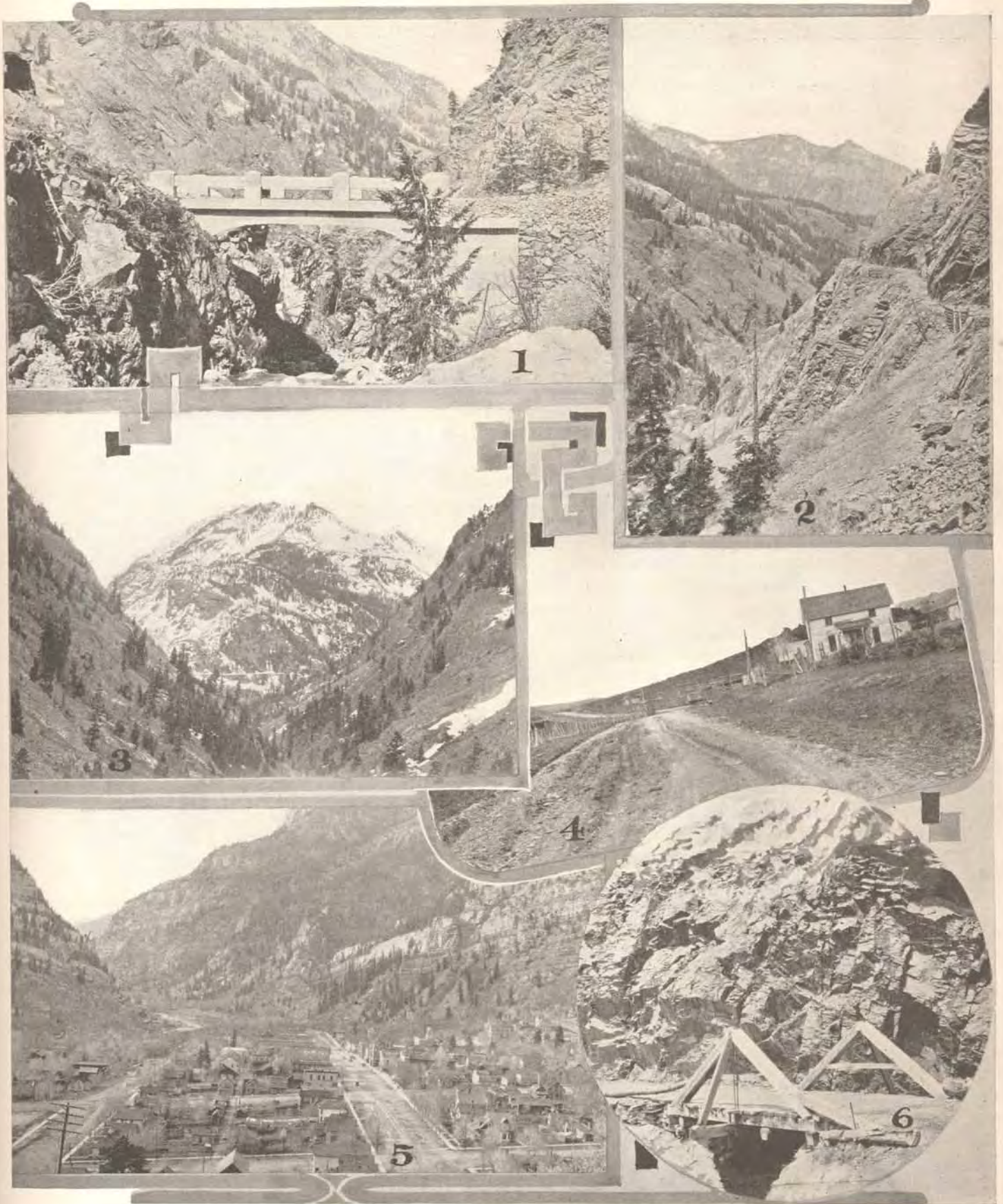
There will be 448 pages in this atlas in Colorado, like the sample, embracing fifteen minutes of latitude and the same of longitude; that is, $17\frac{1}{4}$ miles North and South, and average 13 miles East and West. The scale is about one mile to one inch, making it convenient for a book to take on the desk and study map information.

The reference number at the upper left hand is for use of military men. It may not be necessary in dealing with the whole nation, but in Colorado we have paging at the bottom of the sheet which is more easily understood, so that we can quickly find adjoining sheets.

By bearing in mind that pages are in alphabetical order from North to South and in numerical order from West to East, we can follow a line of investigation across the state in any direction.

The whole system is flexible, easily corrected and kept up-to-date.

One of the most commendable pieces of municipal road building that has been projected in Colorado for years is about to be undertaken by the city of Fort Collins, and will extend from the Edmunds store in that city to the Colorado Agricultural College. This road will be of cement and will be 160 feet wide, costing \$100,000.



1. State bridge over Uncompahgre River, near Ouray. 2. View of Colorado Federal Aid Project No. 26, north from state bridge, P. H. E. 1473. 3. Mt. Abrams, elevation about 13,000 feet. 4. Colorado Federal Aid Project No. 4, showing ruts in shale surface at Rio Blanco, May 5, 1919. 5. Bear Creek Bridge, Colorado F. A. 26.

Bonifaces of Rockies To Motor Around Pikes Peak

Circumscribing Pikes Peak, America's most famous mountain, is to be the unique feature of the annual June outing of the Rocky Mountain Hotel Association, which will take place June 10, 11 and 12, 1919, with Colorado Springs and Manitou as headquarters.

This remarkable motoring exploit is made possible by the construction in recent years by the State of Colorado of two extraordinary mountain roads. The latest of these is one comprising the second leg of the trip around the peak, that from Cripple Creek to Canon City, forty-five miles in length. The other of the comparatively new roads, that from Canon City to Colorado Springs, fifty-one miles in length, was built by convicts from the State Penitentiary at Canon City about eight years ago.

At Manitou, six miles west of Colorado Springs, the hotel men, who are among the State's most ardent advocates of good roads, will be the guests of the president of their association, Mr. E. E. Nichols, proprietor of the famous Cliff House, who is State Highway Commissioner of District No. 2, comprising the district in which these famous roads are located. Mr. Nichols was appointed to the State Highway Commission by Governor Oliver H. Shoup three months ago, and his well-known "faddism" for good roads, coupled with a characteristic dynamic energy, furnish grounds for prophecy that there will be more and more of the remarkable kind already built in the mountains in the vicinity of Colorado Springs and Manitou.

Hoteles which will entertain the association at Colorado Springs are the Broadmoor, W. S. Dunning, general manager; the Antlers, Charles A. Schlottler, manager; the Acacia, J. W. Atkinson, proprietor; the Alta Vista, H. Hoyt Stevens, proprietor; and the Alamo, Robert Hoffman, manager, in addition to the Cliff House of Mr. Nichols. A definite program of entertainment is now being arranged by these operators.

The following letter has been sent out by President Nichols and Secretary A. H. Stevens of the association to members announcing the event:

Office of Secretary

Rocky Mountain Hotel Men's Association

Denver, Colorado, May 26, 1919.

The trip will be made in automobiles, which will leave the Broadway side of the Brown Palace Hotel at 8:30 a. m., Tuesday, June 10, and go to Colorado Springs, where we will be the guests of the Colorado Springs hotel men, who have arranged an elaborate program of entertainment.

We will leave Colorado Springs at 8 a. m., Wednesday, for Canon City, via Cripple Creek and Phantom Canon, where we will be the guests of Mr. W. H. H. Dye, proprietor of the Strathmore Hotel, for luncheon, after which we will leave for Colorado Springs, remaining over night, and returning to Denver Thursday evening.

The only charge that will be made is for automobiles, which will be \$8 for each person.

Please notify the secretary as soon as possible, as we cannot provide seats in automobiles for extras.

A. H. STEVENS, Secretary.

The drive from Colorado Springs to Canon City by way of the Ute Pass, the great gold mines at Cripple Creek and Victor and the Phantom Canon should prove thoroughly enjoyable. Nearly all hotel members have seen the gold camp, but practically none have ever motored through the famous Phantom Canon. This route was formerly monopolized by the Florence & Cripple Creek Railroad, built into Cripple Creek in the very early days of the camp and said to be the only railroad ever built that paid its cost in the first year of operation. When it is considered that the work of construction was among the heaviest ever attempted, and that the road runs through almost impenetrable canons from an altitude of 6,000 feet at Canon City to one of 11,000 at Altman, in the Cripple Creek District, then the highest incorporated town in the world, the extreme early richness of Cripple Creek is appreciated.

But, with the completion of the Cripple Creek Short Line from Colorado Springs to Cripple Creek the gold ore ceased to flow down the Phantom Canon and came down the Short Line and the Midland Terminal Railroads by those easterly and northerly routes to the big mills of the United States Reduction and Refining, the Portland, and the Golden Cycle companies at Colorado Springs. The Phantom Canon Railroad, although marvelous scenically, fell into disuse and the old roadbed has been converted into one of the finest auto roads in Colorado within the past two years. The old iron bridges of the railroad are used by the state road and the "water grade" devised by the railroad engineers twenty-six years ago are ideal for motoring. This new road will be a revelation to the hotel travelers.

The famous road up Ute Pass from Colorado Springs to Cripple Creek is not new to Coloradoans. It is one of the finest in the State and is historically interesting in that it is the route employed by General John Fremont when he made his famous pilgrimage across the continent to California for the War Department in 1848.

From Canon City to Colorado Springs the 51-mile, convict-built road around Cheyenne Mountain will be used. When the motorists pull up to the Antlers Hotel at Colorado Springs upon their return, they will have completely encircled Pikes Peak, and by the shortest possible route, skirting the foot of the famous pile of iron and granite the entire distance. Its vastness can be appreciated when it is realized that the mileage on the wonderful trip from the time of leaving Colorado Springs until the return to that city is 155, with scarcely an unnecessary turn or grade in the entire circumference of the base of the mountain.

Professor Deplores Politics in Road Work

THE element of politics should not enter into the work of any state highway commission, according to Professor Richard R. Lyman, head of the Department of Civil Engineering at Utah University, who was a visitor to Denver May 23rd, and called upon the Colorado Highway Commission at the State Capitol.

For nine years, up to 1917, Professor Lyman was a member of the Utah State Roads Commission. The organization then consisted of the Governor, the State Treasurer, the State Engineer and two "non-partisan" members. Nine years were spent by this board in organizing its work and its engineering force. In 1916, when the commission had finally got to "going good," there were six gangs on concrete road work in Utah, to say nothing of bitulithic, macadam and other classes of highway construction.

But, in 1917 came a new administration, and with it a legislature which created a highway law constituting the personnel of the State Roads Commission as follows: Governor, Secretary of State, Auditor, Attorney General and State Engineer.

The result of this innovation was to brush aside the entire fabric of organization which had been built so carefully. There was not left an engineer, a county supervisor or even a clerk. The result has been that the new organization has had to learn over many of the things that had been mastered by the former commission, which had really just "swung into the stride." Besides, there was Politics rearing its head, for the new law provided that five of the principal officers of state should guide the destinies of the commission.

Logan Waller Page told Professor Lyman ten years ago that the proper procedure for any state in the selection of its Roads Commission would be for the Governor to appoint one man, the Regents of the State University another and the State Agricultural College a third. A year ago he wrote a letter to Professor Lyman reiterating this belief.

Professor Lyman was, during his tenure of office as a member of the Utah Roads Commission, and is now a member of the faculty of the Utah University. He is a graduate of the University of Michigan, class of '95, Civil Engineering, and of Cornell, '03, M.C.E., and Cornell, '05, Ph.D. Good roads has always been his hobby and he has had the finest of opportunity to keep up with the times in his professional and public work in Utah. William Peterson of the Utah Agricultural College was the other non-partisan member of the former Utah Commission.

The State of Utah has available from its treasury \$4,000,000 in state funds for good roads purposes. It has coming from the Federal Government \$3,000,000, and a grand total of \$15,000,000 from all sources, as fast as it

can be spent. For example, wherever the Roads Commission decides to build a road it gets additional money from the city or county in which the road is located, and a property tax, where the property abutting or served has sufficient property value.

For instance, the Road Commission went into the City of Provo with \$6,000 of state money with which to aid in building the main street. The county gave a like amount and the city a third \$6,000. The street railway built 22 feet of the width of the road for the entire distance of one mile to be made and abutting property did the rest. Everyone, state, county, city tramway and property owners, did their part and no bond issue was required. This street, or road, is 99 feet wide and of concrete.

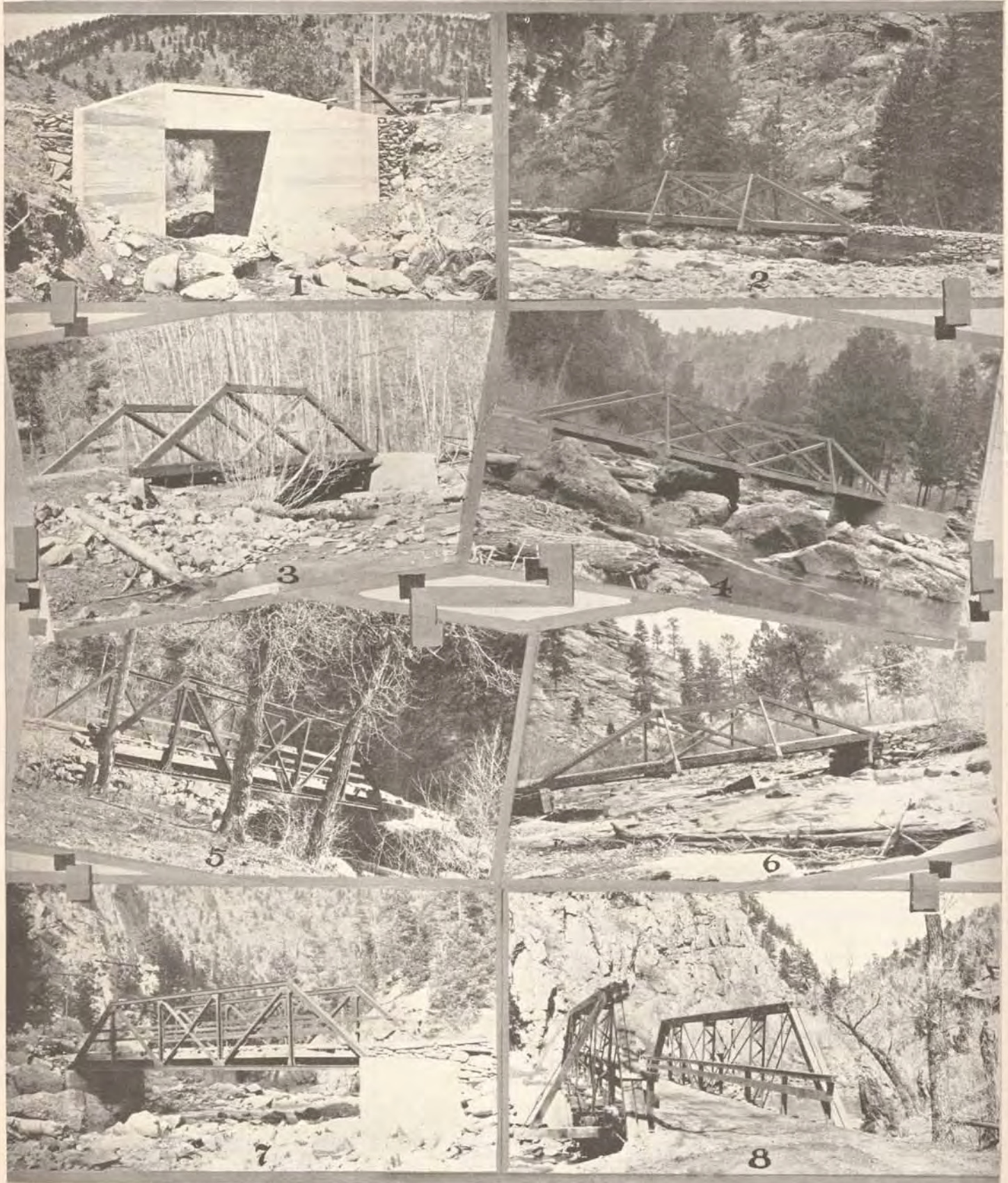
Thus, in Utah, the money of the State is virtually used as a bait. The Commission went into Salt Lake County with \$10,000 and raised \$250,000 with the first sum as a nucleus to build concrete roads. The first concrete roads in Salt Lake County, built about ten years ago, cost approximately \$10,000 per mile, with prison labor. If free labor had been used, the cost would have been probably \$12,000. These roads are 16 feet wide, 8 inches thick in the middle and six inches on the sides. Material is right at hand in Salt Lake County, so the expense of far-fetched road ingredients is eliminated.

Based on long experience, Professor Lyman has his own ideas on the relative values of varying kinds of construction. As to the merits of macadam roads as compared with concrete highways he relates the following experience:

In 1912 the street railway company in Salt Lake City built two miles of macadam road in the northern part of the city, at a cost of about \$8,000 per mile. The same year the City built four miles of concrete road, connecting with the macadam road and subject to exactly the same traffic. The macadam road had to be repaired the first year and had to be sprinkled all the time. It had to be fixed up even more the second year, the third year it could hardly be repaired at all and the fourth year it had to be replaced with concrete. Recently new concrete roads have been built to connect with the old concrete and the original road now appears as good as the new part.

"I believe the Utah State Roads Commission will be compelled to come to the same conclusion as Wayne County (Detroit), Michigan, did sixteen years ago," declared Professor Lyman, "and that is that nothing will do for permanent roads short of concrete. Roads built then in that county are still good, although the traffic is among the heaviest in the world."

Bitulithic roads do well in Utah, much better than macadam, in fact, although both species fall short of the performances of concrete.



A page of Colorado bridges, showing rugged types of iron and concrete. 1. Bridge at Station 207+00. 2. Bridge at Station 472+50. 3. Bridge at Station 308. 4. Bridge at Station 631+00. 5. Bridge at Station 766. 6. Bridge at Station 664, Colorado F. A. No. 9. 7. Bridge at Station 1060. 8. Bridge at Station 151.

Surveys and Plans for State and Federal Aid Projects

These notes are intended as a general guide for the Engineers, in field and office, who are in charge of surveys and plans.

PARTY: The party will be made up of a Field Engineer in charge, Instrument man, Rodman; two Chainmen, one or more Axemen when necessary; Camp man when necessary.

The party should be equipped with a transit with level bubble attachment, a hand level, level rod, two sighting poles, two 50-foot metallic tapes, marked in tenths, in cases, one 100-foot steel band tape, marked every five feet, one single bit axe, two small hand axes, tin case for papers and maps; transit and level books, receipt books, voucher books, weekly report blanks, monthly pay-roll blanks, and tax-exemption blanks for the party. Detail, profile and cross-section paper should be taken.

The engineer in charge will see that all items of expense chargeable to the State are covered by a receipt for each item, and remember that the State Auditing Board will not allow any War Tax payments.

Stakes for the work can be arranged for at the nearest local lumber yard.

In transportation payments, if an automobile belonging to any one of the party is used, the Auditing Board will allow eight cents per mile for Ford and ten cents per mile for all other automobiles.

In Federal Aid work it must be in mind that a project statement is first to be submitted. This is in the nature of a preliminary estimate and description. In some cases a reconnaissance survey is necessary to obtain data for this estimate.

When the project starts at a city or town limits, the zero point should be tied into the street system, so that the adjacent street lines may be shown. In other locations the zero point should be tied into section corners and property lines and referenced by such ties as will enable the point to be readily replaced. For the final location the stationing is to be carried through on the located line, running in the curves and carrying the stations around on the curve.

The P. I. should be carefully referenced so it can be readily replaced.

The following information should be obtained:

All fence and property lines, streets and intersecting roads. These should be carried back at least 300 feet. Telephone, telegraph and power lines—the number on several of the poles should be noted, and street or stream or electrical railroad lines crossing or parallel to surveys, if within 500 feet, culverts and syphons. The span, width of roadway, and character of all bridges, also diameter, length and kind of culverts—also the angle at which the stream crosses the road, the profile of the stream crossings and all information that can be had as to depth of foundation and area of drainage—also a profile up and down

stream for 500 feet is to be taken when the bridge is on a stream that is liable to scour.

Stakes are to be placed every 100 feet, and the line referenced at least every 1,000 feet. Location and character of all material suitable for road surfacing or for construction should be noted.

For concrete work it is very necessary to locate possible sources of sand and gravel. In all marking on the stakes use blue Keil.

Edges of present traveled way and all trees within present or proposed line, buildings along line and mail boxes are to be located.

An approximate classification of material, such as rock and earth, is to be noted.

BENCH MARKS: It is desired to carry the levels on the survey based upon elevation above sea level. U. S. Geological Survey B. M.'s are to be tied to whenever possible. B. M.'s should be established along the line in as permanent shape as possible and should be fully described in the notes. These B. M.'s should be placed at every quarter mile, and at any favorable point along the line of survey.

GRADE LIMITS: The grade should be not to exceed 6 per cent, except that for short distances of not to exceed 2,000 feet, 7 per cent may be used if necessary to avoid heavy work.

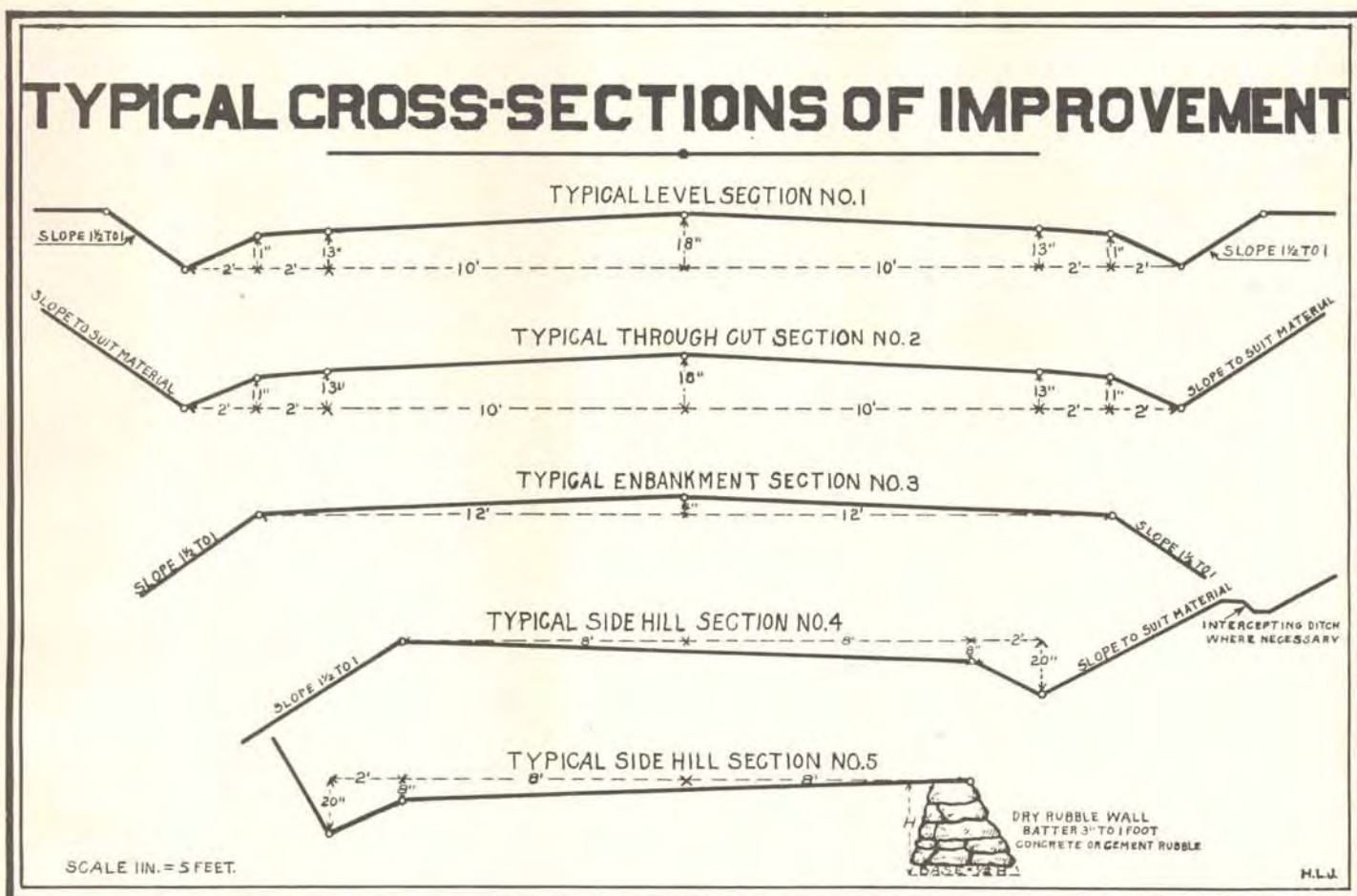
It is to be borne in mind that this location is to be the final for many years to come, and the grading and surface improvements will be made upon it from time to time to meet the traffic conditions. So to avoid an entire new location in the future the grade should be placed where it is going to stay.

CURVATURE: The U. S. Bureau recommends a radius of not less than 100 feet. This can be adhered to very closely in the valleys and plains. In the mountains this is not possible, except at an unreasonable expense, but it is desirable that the radius shall be as large as possible within a reasonable cost. It is suggested that a radius of not less than 40 feet be used on any switchback or curve. A great many of the present curves on the roads are unnecessary and could be eliminated by a little grading work.

In relocating a road or stretches of an existing road, the location of the old road should be made in every case.

LEVEL DATA: A center line profile of road points is to be taken at least every 100 feet, and intermediate when necessary. Elevation at inlet and discharge of each culvert and profile under bridge. Cross-section every 100 feet and at such intermediate points as are necessary to give an accurate measurement of the yardage. Cross-sections should extend each side of road far enough to give the ground slope for any possible cut or fill, and to allow for a slight shifting of the line.

In running to section corners or other points, remem-



ber that we are not relocating or replacing corners or correcting property lines; we are simply tying our line to these points.

In all cases the survey should cover the entire distance between the terminus, even though it is not intended to work upon the entire distance.

PLANS: The line and profile is to be placed upon the plan and profile cloth. Scale for line to be 1"=100 ft.

And for profile horizontal 1"=100 ft.

Vertical 1"=10 ft.

Cross-sections to be platted on paper, using a scale of 1"=5 ft.

The grade line to be used on profile is the surface of the finished road at the center.

Cross-sections are to be platted from the lower left hand corner up, and as close as may be convenient. Area of cut and fill to be noted on each section and cu. yards excavation and embankment between the sections. Vertical curves should be shown on the profile giving the elevation of the P. C. and E. C., also the length of curve. A general structure sheet is to be made showing types of culverts headwalls and summary of quantities, also sheets giving plan, profile and details for any bridges included in the project. Present ground surface is to be shown by a short dash line, and proposed grade line by a full line. Careful inspection of the cuts and fills along the line must be made so that overhaul will be avoided as much as possible, the free haul limit being 800 ft. All drainage structures must be shown on the profile.

All sheets to be 36"X22" with a 1/2" margin on top right and bottom, and a 2" margin on the left.

Typical sections for earth roads are as given herewith.

Colorado Commission Honored

(Continued from Page 13)

best sense congress will soon take a greater interest in the development of the present parks and the extension of the system. The public will require this of its servants. It is not longer a "fad," as members of congress were wont to infer not so long ago.

From this campaign the people will come to know nature and the majesty of their own land. Students will be aided in their work in investigating the secrets of nature as contained in the parks. The public will be enabled to visit with greater ease and, in time, less expense the chain of parks. The new organization will keep in close touch with transportation companies; it will have a marked influence on road building and repair and it will deign to use the "movie" to acquaint the many with the beauties of the parks. The aim will be to make the national parks an economic asset. The educational campaign will not be confined to this country. Before long thousands of tourists from foreign lands will be coming this way every year, thus reversing the old order. Government and banks tell us that almost unbelievable sums will go abroad to maintain Americans in Europe in the coming years. There ought to be a "drawback."



Colorado's Most Prosperous Year

(Continued from Page 6)

years, and others are to be worked anew as the season advances. Lower production costs are encouraging a somewhat larger output of gold and many gold-producing properties that did little but unproductive development work during the last year of the war will soon begin to produce at full capacity.

There is much inquiry from men in other states for investment opportunities in Colorado, in agriculture, in mining, in manufacturing and in general lines of business. The influx of land buyers from other states to Colorado is somewhat above normal, though not so heavy as it has been at other times during the past two years.

These facts, which have been conservatively stated, indicate that, with continued favorable conditions, the year 1919 should be one of the most prosperous in the history of the State. The road building program for Colorado this year is the most ambitious yet undertaken, and the construction and improvement of new roads has had much to do with the rapid development of all lines of industry in the past few years, and particularly of farming and the manufacturing and other industries that depend directly upon the products of the farm.

County Commissioners Are Busy

Harris Akin of Fort Collins and C. M. Garrett of Larimer County Commissioners, County Attorney Lee and Secretary Edmunds of the Commercial Association at Fort Collins were visitors at the Highway Commission offices in the State Museum building for the purpose of arranging for the starting of work on the Poudre Valley Road, where Dooling Brothers and Crook and Hoffman are contractors. As a result of this conference with the State Commissioners, work was begun June 1.

County Commissioner A. Lindstrom of Dillan and Mr. Morris of Breckenridge, Summit County, visited the Capitol to arrange with State Engineer J. E. Maloney for a survey of the proposed road down the Blue River from Breckenridge to Kremling. Accordingly, Deputy Engineer Allen Tanner was despatched to make the survey. This road will be 48 miles long and picturesque and will be part of a wonderfully scenic circle trip from Colorado

Springs and Denver to Kremling, which is situated on the Midland Trail at the confluence of the Blue with the Grand. Commissioner T. J. Ehrhart and Engineer Maloney recently motored out from Denver and inspected this road, crossing Hoosier Pass from Breckenridge to Hartsel.

Speeding Federal Road Work

Initial steps in Federal road building, which will demand expenditures of \$1,500,000 in Colorado this year, will be taken soon, when the bureau of public roads of the United States department of agriculture will open bids for \$500,000 worth of construction on the fifty miles between Silverton and Durango. This is the largest of the projects covered by the expenditure for the year.

The bids on the Monarch Pass road construction, opened May 24th, were rejected. J. S. Bright, district engineer of the bureau of roads, declared that the work on that section will be completed this year, even if the bureau must do the work itself. These bids were turned down because the contractors failed to bid on the complete twenty-seven miles, and because they did not come within the appropriation for the work.

The Monarch Pass road, running from Garfield to Sargent, will connect Salida and Montrose, and cross the continental divide 30 feet lower than the present highway over Monarch Pass.

T. J. Ehrhart, State Highway Commissioner, and Mr. Bright, made an inspection trip over this route in the last week in May.

Contract will be let immediately by the bureau of roads for construction work on the Deadwood-Hot Springs, S. D., road, bids for which were opened Monday, May 26th.

The bureau will open bids for the Wind River road to the Yellowstone National Park, and others for the Buffalo-Tensleep route in Wyoming.

Good news has been received in a telegram from the Department of Agriculture to the effect that 97 trucks have been awarded Colorado for the use of the State Highways Department. These are part of the 20,000 trucks built for use of the War Department for use in Europe and no longer needed there.

333 N III W/2

DENVER SHEET-PROGRESSIVE MILITARY MAPS

Lat. 39°30' to 39°45', Long. 104°45' to 105°00'

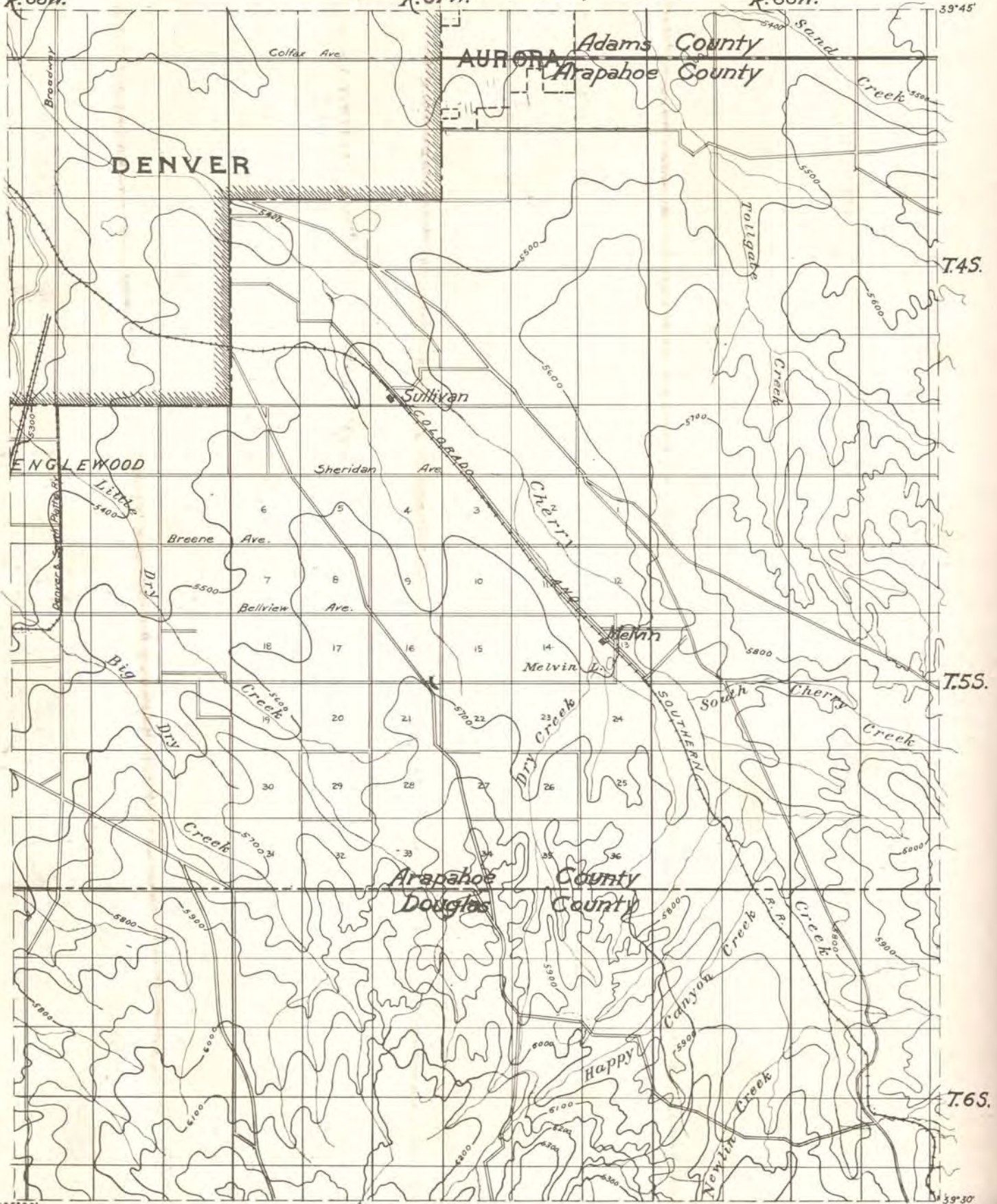
May 1919

R. 67 W.

Reported by

R. 66 W.

R. 68 W.



105°00'

39°30'