California to Get Largest Telescope

Palomar Mountain to Be Site of Giant Mirror.

Washington.—Search for a desirable location for an observatory in which to house the world's largest telescope, which will contain a 200-inch mirror, ended recently in the choice by scientists of Palomar mountain, about 50 miles northeast of San Diego, Calif.

"For several years astronomers have been studying the map of the United States for a new observatory site," says the National Geographic society. "They chose Palomar because, according to specialists, it is far enough from the desert on the east and the Pacific ocean on the west to give promise of atmospheric conditions favorable for astronomical studies.

Rises 6,126 Feet.

"Palomar is not one of the giants among mountains of western America. In fact it is not as high as many of the peaks of the eastern United States, for it rises only 6,126 feet above sea level. Nor is it even the highest mountain in southern California.

"It thrusts its rugged summit above the valleys of Cleveland National forest, a tract 27 miles long and from 5 to 12 miles wide, comprising portions of Orange, Riverside and San Diego counties. Created in 1910 by a reorganization of several earlier forest reserves, Cleveland forest, named for ex-President Cleveland, includes five mountains in addition to Palomar. The forest was created primarily for watershed protection. It supplies eight reservoirs with a capacity of 125,000,000 gallons. It contains more than 225,000,000 feet of salable timber.

"Before the gold-hungry hordes of 'Forty-Niners' moved their caravans across the western plains and through the passes of the Rockies, Palomar was a favored hunting ground among the Indians of the region. In 1831, Palomar was visited by a white man named Warner. He settled near its slopes, became a naturalized Mexican citizen —California then was Mexican—and a grant of land, including Palomar and its environs was made to him by the Mexican government. From Warner, the Warner Hot Springs near Palomar get their name.

Favorite Camping Site.

"The summit of Palomar is blanketed with a thick growth of timber—cedars, spruces, pines and black oak, in whose shade each year thousands of wanderlusters hike and ride horseback over narrow, tortuous trails. Many pitch their camps in the brisk air of the summit. Through openings in the thick forest, mountain climbers are rewarded for their fatiguing trek by spectacular views of the country for miles around. Many miles of San Diego county, a veritable flower and vegetable garden, are at their feet. In some places one's viewpoint is atop a ridge whose sides tumble in steep grass-covered slopes for thousands of feet to the valley below.

"The 200-inch telescope mirror to be placed on Palomar will be twice the diameter of the mirror at the Mount Wilson (California) observatory—at present the largest in the world—which has made possible many notable contributions to astronomy. The first attempt to cast the great glass disc for the mirror occurred in the spring of 1934 at Corning, N. Y. The pouring constituted one of the outstanding scientific feats of the year and was witnessed by thousands of scientists and laymen.

"But the huge glass lens was found to have a slight imperfection, so plans have been made to pour a new one. When completed, the mirror will weigh about 18 tons, will reveal billions more stars than can be reflected by the Mount Wilson mirror, and will pierce space to 30 times the distance now possible."

A "Smith" Is Born Every 11 Minutes

Glasgow.—A man named Smith who has retired from the army and is living in Glasgow with a lot of time on his hands, has devised the agreeable pastime of counting all the other Smiths there are in the world, the net of it being that on December 21 last, the figure was 12,635,005. This presumably included all the national variations like Schmidt and Smythe, and figures out to the effect that there is a Smith born somewhere in the world every 11 minutes.

METAL-DOT NET

By CHERIE NICHOLAS

Formal evenings of leisurely dining, carefree nights of dancing to rythmic orchestras under soft lights are festive and fashion occasions which call for just such beguiling gowns as here pictured to lend yet more enchantment to so glamorous a setting. This lovely evening dress is made of a rather heavy metallic net, called supernet because of its dependable, durable quality. The net used for this winsome model is black with gold-embroidered dots—just conservative enough to make it appropriate for many occasions. However, if you want more color this semi-heavy net comes in the most beautiful rich fall shades imaginable. The skirt is cut with a flaring swish and swirl, falling from the knees in tiers of net. Simplicity and modesty add charm to the bodice. Among the luxurious materials leading the fabric fashion, tulle, lace and net and similar diaphanous textures are outstanding this season.

River Packets Are Done, Says Captain

Declares Federal Barges "Tough Competition."

St. Louis, Mo.—The good old river packet days are gone forever in the opinion of Capt. Tom C. Booksh, master of the steamer Kurzweg, port of New Orleans.

Although once a familiar sight—that of a river packet tying up at the St. Louis waterfront—the docking of the Kurzweg created quite a stir. One of the few remaining packets on the Mississippi, it is even different in appearance from the ones which steamed into St. Louis when river travel was in its heydey.

Powered by Diesel Engine.

No tall ornamented smokestacks decorate the top deck of the Kurzweg. Instead an exhaust pipe to the rear for carrying off the fumes of a large Diesel power plant.

Captain Booksh, however, brings to mind the packet masters of the "good old river days." His soft-voiced southern drawl called a hospitable invitation to come aboard. For twenty-four years he has been on the river. His face and hands deeply tanned, the captain motioned to a negro on deck.

"Some coffee, Nathan, and hurry along," said Captain Booksh.

When it came it was thick, black and sirupy, the type now found only in New Orleans; oh, yes, and on river packets.

A federal barge line towboat came by, pushing a string of barges ahead of it.

"Competition with those fellows is tough," remarked the captain. "Every one of 'em will carry a thousand tons, more or less. We brought 350 tons of sugar and empty beer barrels up and have about the same tonnage to return with."

No Passengers Found.

Pointing to a row of empty staterooms, Captain Booksh said he had advertised for passengers in New Orleans and didn't get a one.

"When a man wants to get somewhere nowadays he wants to get there quick," he drawled.

To St. Louis and back to New Orleans, including loading and unloading, takes about twenty days for the Kurzweg.

"No, it don't look like the steamboat packets will ever stage a comeback," said Captain Booksh, "what with trains, busses, automobiles, airplanes and, of course, barges to compete with."

Riches of Poor Widow Revealed After Death

Hatfield, Mo.—Mrs. Rachel Hopper had lived the life of a poor widow during the last several years. She was receiving a government pension and wore heavy winter clothes throughout the summer because she apparently was too poverty-stricken to buy new ones.

When she died, however, authorities found $1,517 in currency sewed up in an underskirt and $2,168 in cash and bonds hidden in the flour barrel.

High School Students Will Build Classroom

Lancaster, Pa.—Students in the automobile mechanics class of Lancaster high school will turn carpenters and build their own classroom.

The new addition to the school building will cost $2,200 and will be approximately 41 by 26 feet.

The vocational educational classes in metal work and electricity will do the metal work and wiring for the addition.

AIR FORCE OF U. S. IS FIFTH LARGEST

France, With 2,891 Planes, Leads the World.

Geneva.—The largest air force in the world is owned by France, according to figures published in the League of Nations armaments year book.

The grand total of 2,891 planes, including those in service, in immediate reserve or used for training purpose, is practically equal to the combined strength of the next two most heavily armed powers.

Great Britain's grand total of planes ready for war or in immediate reserve, but exclusive of training planes, is returned at 1,434, the same figure as in 1931.

The United States reports 743 planes belonging to the army air force and 518 belonging to the navy. Both these totals include only aircraft in commission and exclude schools, training and experimental craft in service.

Soviet Russia gives no later figures than 1931 and claims only 750 planes.

The Italian figure for 1931 is given as 1,507 planes. No later data is available.

Japanese figures for 1933 give a total of military planes of 1,140 with an additional 329 naval planes carried in warships and aircraft carriers. A coastal flying corps of 472 planes is stated to be in process of formation.

All That Was Left of the City of Nome

This photograph shows what was left of Nome, Alaska, after the recent disastrous conflagration that nearly wiped out the famous city.

SEEN and HEARD around the National Capital

By CARTER FIELD

Washington.—Passing of J. F. T. O'Connor out of the office of comptroller of the currency is actually of far greater significance than many other changes, which have received more publicity. For it means more than the mere desire of Secretary of the Treasury Morgenthau to dominate completely every official in the Treasury department and affiliates—if that word can be used without offense, meaning of course such divisions as were formerly—even under McAdoo—independent baronies. Such as the bureau of internal revenue and the office of comptroller of the currency. And for that matter even the supposedly independent federal reserve board.

It is with respect to the latter two that the change is significant. Under the plan of President Roosevelt and Secretary Morgenthau the reserve board, exercising such extraordinary control over banks, and the comptroller's office, which has the function of keeping the banks examined and being sure that they are sound, are integral parts of the treasury and must be controlled absolutely according to treasury policy.

Not that there has been in the past any very wide divergence, but when there was unity of policy it was brought about either by similar thinking—at the White House, the treasury, the reserve board and the comptroller's office—or by moral suasion. There was never any intimation of coercion.

As for example when President Hoover, early in his administration, induced the reserve board to bear down hard on speculation, but not to raise the rediscount rates.

And later on, after the secondary phase of the depression, how Hoover's policy of encouraging struggling banks by not being too drastic about the national bank examiners' discoveries that many banks were not really sound. And, just before that, with regard to boosting of foreign government bonds to domestic banks. Which last was one of the reasons, of course, that so many banks were very hard hit, while the laxity after trouble began was the real reason for the debacle, ending in the banking holiday of March, 1933.

Go Easy on Banks

The new policy, of direct control of both reserve board and comptroller's office from the White House, via the secretary of the treasury, is the more interesting because of the recent speech of Jesse H. Jones of the Reconstruction Finance corporation, to the bankers' convention.

He first urged the bankers to be more liberal with loans, and then hinted that examinations of sound banks once a year would be ample!

In short, if the banks do what the administration wants, the administration will see to it that they are treated liberally. It is a small point, in comparison with the broad idea, but the idea of less frequent examinations appeals strongly to the bankers on a side which might not at first occur to the average outsider. Examinations by the national bank examiners are pretty expensive for the individual banks. The banks pay out of their own treasuries the salaries of the examiners during the period they spend at their banks. And expert accountants are not poorly paid men, by any means.

So a bank, which is not doing right by the New Deal in the opinion of the higher-ups, is not only to be scrutinized severely, it may be inferred, but subjected to heavier fees for examination than if it were putting its shoulder to the wheel of recovery, as seen by the administration.

Which is one of the reasons why, when the bankers arrived back home, after the convention, some of them had that worried look.

What Japan Fears

Japan's demand for naval parity with the United States and Great Britain, at the London naval conference, is really aimed, according to some very astute diplomats here —not at parity at all, but at the naval weapon Japan fears most—the airplane carrier.

It requires very little study of the map of the world to figure out what Japan is thinking about. She certainly is not worried about having a few more battleships to bring the Japanese quota up to Washington treaty standards, or equality with Britain and America. Actually, she is not worried very much about the new type of cruisers, or submarines.

She has always insisted that the submarine is a defensive, not an offensive naval weapon. The point is open to argument, of course. The average British naval expert becomes enraged at the suggestion, recalling the fact that Germany used the submarine not to defend her coasts—which the Japanese and French have always insisted is the type of warfare for which the undersea boat is designed—but in an attempt to starve Britain into submission.

Certainly, the British naval experts admit, the battleships and cruisers are offensive in type. Britain's attempt to starve Germany, and to cut off war supplies, was very much of an offensive. The use of German submarines to smuggle supplies in was defensive, they admit, but the attempt to blockade Britain was offensive.

But Japan's argument about submarines is just so many words. No one at any time has expected to restrict Japan in this direction. And even the British gave up the attempt to outlaw the submarine during the Washington arms conference.

But Japan would like very much to prevent the other naval powers from building so many airplane carriers. This type of ship, able to come up within striking distance of any coast and launch a swarm of bombers and fighting planes to protect them, is the menace that worries her most. For the present school of thought about airplanes is that the art of defense against airplane attack is far behind the art of aerial attack.

Expects Compromise

So Japan has demanded something at the London conference which no one is willing to give her, and which she really does not expect to get, in the hope that she may actually get what she really wants as a compromise. Which would save every one's face and remove at least part of a great fear from the minds of the Japanese admirals.

It is characteristic Japanese diplomacy, old hands at the game here point out. It was recalled by one ambassador, who was a junior in his embassy at the time of the Washington arms conference, how Japan maneuvered the United States at that time. There had been tremendous protests by Nippon at the California land laws, the school restrictions, and other "outrages." Japan had the United States in an indefensible diplomatic position. This government could not say to Japan that these things would stop, because this government had no right to force California's hand. On the other hand, the United States could not tell Japan that, for Japan would then presumably have the right to negotiate direct with California.

Eventually everything was forgotten. But most people do not know and nothing was ever published about what our State department officially forgot. That was the American protest against Japanese occupation of the upper half of Saghalien island. Japan thought there were tremendous oil reserves there, so she regarded that acquisition as vital. Our protest worried her considerably. And so she put our State department, through California, on the spot. And she had her own way with Saghalien.

Case of Sinclair

President Roosevelt seems to have done a right-about-face with respect to Upton Sinclair. At any rate there are strong indications that the administration was privately hoping that the radical so overwhelmingly nominated on the Democratic ticket for governor of California would be defeated.

The lines on which this statement is made are admittedly rather thin. But one of the more conservative workers in the national committee said in the presence of the writer that it would be necessary—after the election—to entirely rebuild the Democratic organization in California. After Sinclair's defeat, he meant.

Which resulted in the question being put to him flatly as to what he heard about Sinclair's chances. Although he obviously became a great deal more cautious, at once, he admitted that so many Democratic leaders had deserted Sinclair that he did not see how he could win.

Now that would really have been enough to show how the wind was blowing. For no one working for Jim Farley ever admits there is a chance of their candidates losing anywhere—not even in Vermont.

But this is not all the evidence. Other high figures in the Democratic party have complained in the last few days that Sinclair, in speeches made subsequent to the California state convention, has not stood on the platform framed by that convention.

Turn Big Guns Loose

As a result certain bigwigs in the Democratic national oratorical artillery were not found speaking in California before election—even some who would have liked to go. For instance: Relief Administrator Harry Hopkins. Hopkins threw his hat in the air just after Sinclair was nominated. But somebody spoke harshly to him about that, just recently. Anyway he did not go.

Neither did Public Works Administrator Ickes, though he can find plenty of time to denounce David A. Reed and boost Joe Guffey in Pennsylvania. And that is not just because Pennsylvania is closer, either.

All of which is rather perplexing. Here we have the administration going out of its way to smooth the path of Hiram Johnson, in California. Yet the administration does not seem to have the same gratitude for Bronson Cutting, in New Mexico. It profers young Bob La Follette in Wisconsin to the Democratic candidate. But that is not so strange, for this candidate was one of the Stop Roosevelt men at Chicago.

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OREGON

Prospecting for Gold in an Oregon Back Yard.

Prepared by National Geographic Society, Washington, D. C.—WNU Service.

ONE hundred years ago, a Methodist minister, Jasen Lee, Bible in one hand and rifle in the other, plodded through the Willamette river valley and made the first mission settlement that was the beginning of the state of Oregon. Others had visited the territory but historians aver that Lee was the first to vision the region he settled as a future state.

Discovery of Oregon came first by sea. But for nearly three centuries the wild and dangerous aspect of the mountainous coast held at bay the navigators of five nations who sighted it. Spaniards, Russians, Englishmen, Frenchmen, and then Americans searched vainly for the fabled "River of the West" that legend said flowed through this coastal mountain barrier into the sun-down sea.

It remained for a Yankee skipper, Robert Gray of Boston, seeking a cargo of furs for the China trade, to find and cross the breaking bar of the mighty river in 1792. He named the river for his ship, the Columbia.

Captain Gray, who traded a chisel for 200 otter skins, probably did not sense the river's destiny in the clatter of his plunging anchor chains. After establishing this claim to the River of the West for the infant American Republic, he continued to stoke his hatches with fur, and sailed for the marts of Canton. But the barrier was broken, and the Columbia became the wilderness highway through Indian Oregon.

In the exploration by land that followed, Lewis and Clark led the way across the continent in search of the headwaters of the Columbia, 13 years after Gray had entered its mouth. Close in their moccasin trails followed fur traders and trappers of two nations, competing for control of this stream that drains an area of 250,000 square miles, taps the snow beds of the Yellowstone and the Saskatchewan, and provides the only sea level passage through the lofty Cascade Range to the Pacific ocean.

Over the Oregon Trail.

For more than a generation Columbian waters echoed to the buoyant songs of the fur brigades before the first covered wagon, hauling an iron-nosed plow, rumbled westward. Then, beginning in 1843, throngs of men, women, and children trekked over the perilous Old Oregon Trail from the Missouri.

Covered wagons, stretching as far as the eye could see, rumbled their toilsome course toward the Columbia, carrying pioneer families into a tragic struggle with stalking death. The old Emigrant road is strewn with unmarked graves. In 1852 several thousand persons died from cholera alone.

This western migration of home builders, bearing the elemental beginnings of empire on their wagon beds, created, by the things they did, a heritage of spirit that runs through the years and the generations of people.

The goal of this 2,000 mile trek was the fabulous Eden of the Willamette valley.

Here, near the junction of the Willamette and Columbia rivers, the building of Portland into one of the world's major inland seaports and the peopling of its enormous domain mark an American epoch.

People once considered the city's distance of 100 miles from the sea a disadvantage, but this location has been a major factor in its growth.

From Portland, the broad and populous Willamette valley extends south for 150 miles between the Cascade and coast ranges, containing, in only about 14 per cent of the area, 64 per cent of Oregon's population. Agriculture is concentrated on either bank of the river in a belt five to ten miles wide.

The highway above the canyon furnishes an excellent vantage point from which to watch the spray from the horseshoe-shaped Willamette falls rising to mingle with the blue smoke of the woolen, pulp, and paper mills that its thundering waters operate on either bank. These falls have long been famous for their salmon fisheries.

Above this lava obstruction the Willamette valley for 135 miles to the south has been filled with silt, forming a broad, alluvial valley floor. This floor is 100 feet higher than it would be without this natural dam; hence the streams that flow into the Willamette from the bordering Cascade and coast ranges deploy upon the plain and form a natural irrigation system for the valley.

Many communities have concentrated in the production of one crop, such as loganberries, strawberries, cherries, prunes and celery. Most of this produce moves direct to more than fifty canneries located in the valley; some is shipped to distant markets.

Champoeg and Salem.

Twenty-seven miles north of Salem is Champoeg, the "Plymouth Rock" of Oregon. Here, on May 2, 1843, pioneers organized the first American civil government in the Northwest—an event which, during the dispute with Great Britain, helped to save Oregon for the United States.

Salem, hub city of the Willamette valley and capital of the state, lying 52 miles south of Portland, is the center of the largest hop-growing area in the United States and is also one of Oregon's largest fruit-canning centers. With a climate similar to that of Ireland and portions of Belgium and France where flax is grown, Salem has made a persistent effort to establish a linen industry. Not only does this area grow long-fiber flax but it has two linen mills.

To obtain a better view of the valley one may climb into the lofty copper dome of the state capitol, overlooking the city, more distant hop fields, and red orchard hills.

A stone's throw across the street are the historic buildings and campus of Willamette university, the oldest educational institution in Oregon. Newberg, McMinnville, Albany, and Forest Grove have similar institutions, monuments to pioneer days, when religious sects founded academies and small colleges almost before they were settled on the land.

Both the Oregon State Agricultural college at Corvallis, and the State university at Eugene, are surrounded by green-shaded campuses that are veritable garden spots in this beautiful valley.

Douglas Fir and Cedar.

Although flanked by vast resources of Douglas fir, the Coos bay region is noted for its Port Orford cedar. These valuable forests reach south to the Rogue river, in a belt rarely more than forty miles wide, growing amid protecting firs.

The Japanese flag waves in and out of Coos bay over the stern of vessels carrying Orford cedar logs and squares to Japan for house construction.

All the verdant richness of spring seems to be blowing landward on the moisture-laden sea winds. For miles the Oregon Coast highway runs through arcades of rhododendrons.

North from Tillamook bay for 35 miles one drives through rich pasture valleys devoted almost exclusively to the production of Tillamook cheese. Factories of the farmers' association dot the valley floor along the highway, using altogether about a hundred tons of milk daily in the production of a standardized product. Each community builds its own factory and keeps its own books, but the expenses of the buying and selling organization are pooled and prorated according to the number of pounds of cheese produced.

About Astoria, at the mouth of the Columbia, much of the early history of Oregon is woven. To the south, across Youngs bay, Lewis and Clark wintered in 1805-06 at Fort Clatsop. The Pacific Fur company started, 204 years after Jamestown was founded, to erect the fort, which became the nucleus of the first American settlement in the Columbia valley. It took four men two or three days to cut down one of the lofty firs.

When fur passed, Astoria took to fishing and lumbering, and spread out on pilings over a tide flat along the river. If business was slack at high tide, clerks dangled their hooks through trapdoors and fished; boarding masters shanghaied men through trapdoors of saloons for Cape Horn voyages.