

AN ADVENTURE IN THE IRRIGATED LAND :: By OLIVER DIBERT

AS Mrs. Clawson entered the kitchen, carrying a pan piled high with new potatoes, she threw an impatient sharp glance toward her husband. He was standing near a chair, his hand resting weakly on his back.

"You kin talk to me forever, Hi Clawson, 'bout that water; but if I had fifty springs 'stead o' fifteen and the dry season lasted twelve months 'stead o' six, not a drop, not a solitary drop, would Mary Long get from one o' my trenches. She's no friend o' mine—"

"She wuz back East, mother—"

Clawson choked at his boldness. "Her veg'tables is all dryin' up—her boarders is leavin' on ev'ry down stage—"

A faint red showed itself under Mrs. Clawson's dark, wrinkled skin. She lowered her brows ominously.

"D'yeh happen to mind Mary Long a-prophesyin' that I'd never do better than pick up a crooked stick in the matrimonial market?"

Clawson had heard the report of Mary Long's speech on the occasion of many family jays; yet the words never failed to make him wince. He sat down, throwing one knee over the other. Then he crossed his wrists and let his head fall forward humbly.

"I wouldn't lift a finger"—Mrs. Clawson's voice was as solemn as the tolling of a bell—"for Mary Long—I wouldn't give her a cup o' tea if she come a-beggin' at my back door. No; not—not if even Bobbie sat me to."

Bobbie was her son; and to refuse any request of his was the final test and triumph of Mrs. Clawson's will power.

Clawson's eyes followed his wife as she drew up a chair and began to scrape the skins from the small, pink-brown potatoes. A look of incredulity came into his patient stare and rested there.

After a little while, he said, still observing his wife keenly: "I never knew yeh to refuse Bobbie anything yeh. I bet if he'd want o' marry Mary Long's girl yeh'd—"

But he stopped speaking, silenced by

the glare from his wife's dark eyes. The hand holding the knife began to tremble.

"You ought 'o be ashamed o' yourself suggestin' such a thing. Our Bobbie to marry into that family! I'd rather he'd marry an injun from up the valley. Don't set there with that look on your face as if you b'lieved such a thing could happen."

She threw her head up swiftly, keeping her eyes on her husband, meaning to look him out of countenance.

His glance dropped. "Don't let's quarrel, mother. Got anything for me to do? Got plenty o' wood in?"

For a moment she was silent. Her husband must not be permitted to imagine that her indignation could be appeased by such trifling overtures.

"Yes," she said, cutting off the word fiercely. "I have somethin' fer you to do. Strengthen up that trench where it makes the sharp turn nex' Mary Long's field. We'll be irrigatin' her corn patch the first thing you know." She spoke contemptuously; then she laughed, low and maliciously. "That dry trench o' hers with only a foot or two of solid ground between it and that fine little stream of ours! And some time, father, between this and bedtime, I want you to take a stick and scratch two or three little channels down toward the tomatoes. The other garden stuff is fairly growin' up out of the swamp; but, somehow, the tomatoes has been forsaken."

Clawson rose and slowly left the room.

While Mrs. Clawson prepared the noon-hour dinner, she frequently peered up the long slope leading from the kitchen porch. It was planted in methodical patches of garden truck. Some of the green clumps had outgrown their strength and could be seen to sprawl, as if for support, over smaller, stockier growths. Mrs. Clawson's gaze was bounded by a hedge of manzanita, whose small trunks and twisted limbs showed a soft red, like dressed cedar. A wide ditch ran along the hedge, the water turning near the group of pines and bur-

rying down through the southwestern corner of the Clawson ranch to the creek.

When Mrs. Clawson saw her husband bend to pick up an armful of broken rock she sat down contentedly near the open door; she braced the small, square coffee mill firmly between her knees, and turned the handle with a fierce, spirited movement.

"Clawson, dinner's ready," she called, half an hour later.

As she went along the path she pulled off the withered roses from the bushes. When she came to the barbed-wire fence, she stood looking out critically across her neighbor's blighted cornfield. Not a healthy stalk to be seen anywhere among those sickly plants; each one thirsting for water.

The ditch flowed rather noisily at her feet as it ran along the steepest part of the hill. Three hundred feet west the creek sang musically in a muffled roar.

Mrs. Clawson's thin lips curved in a downward crescent.

"Clawson," she called again. But he was at her side; and followed her heavily over the plank laid across the trench.

"Whatever has become of that boy of our," she said, affectionately. "Took his rods and fly-book out with him early this morning. Said he'd be back at dinner time, sure. Well, Clawson, how'd you get along with the work?" She turned a suspicious eye on her husband.

"I tightened the wall," he replied, meekly.

They walked along silently to the kitchen door. Mrs. Clawson went on, going round to the front of the house. She looked about in every direction, shading her eyes with her brown, knotty hands. She tried to decipher the spaces of shadow among the thickets and trees near the creek. She thought she saw a splotch of dark red and gold color.

"Must be the sun strikin' on the back o' wild cattle. They been a-strayin' round here lately."

She started toward the creek. Then

with a wavering movement turned and hurried back to the kitchen.

"You better start eatin'," she called to Clawson. "I'm goin' down to see if I can't see somethin' o' Bobbie. Don't touch that light pinkish piece o' ham in the skillet; that's fer Bobbie."

Mrs. Clawson walked with long strides through the young orchard. When she came to the bank, where the footpath descended precipitately to the creek, she stopped, looking up, down, across. The water dashed, foaming, from among a tumbled mass of boulders.

She went down the path, brushing against the willows. At the opening where the bushes had been cut away, she could see the bend. The water ran swiftly around the low, opposite bank; broke into a stretch of little, metallic-like waves. Over there the trout might be caught by the hundred in an hour or two.

Mrs. Clawson thought she heard a laugh, shrill and happy, above the bubbling and chatter and roar of the creek.

Then she saw a young girl throw up a line, on which dangled a frantic fish. Near by, her son stood, his hands in his pockets, laughing.

Mary Long's girl!

The same golden-red hair; the same vivid coloring in the cheeks and lips; the same dark, luminous eyes.

Bobbie was now tearing the fish off the hook—not taking his gaze, which she knew was tender, from the face of Mary Long's girl.

Mrs. Clawson watched the young girl as she scrambled to the bank, trying to catch the writhing and leaping trout. She noted the soft, pretty outlines of the girl's figure as she swayed forward to throw the fish out into the middle of the stream. She saw the coquetry of Miss Long's demure return to her son's side; the challenge in her glance up to his. But when he put his arms around her she turned deliberately and stamped firmly up the path.

Mr. and Mrs. Clawson sat on the back porch. It was growing dark. Mt. San-

heddi was a mere blur against the dusky sky; the entrance to the little arbor, over which the wild hop-vines rioted, was fading into the general dimness.

For half an hour no word had been spoken. At last Clawson, summoning up courage, said: "I didn't think you'd let him git so far, mother, as to be upstairs there alone packin' his things."

"I didn't know you ever did any thinkin' on any subject, Hi Clawson," she replied. A tear, of which she took no notice, coursed its way down her thin cheek.

Silence reigned for several minutes. Then Mrs. Clawson said, in a sad monotone: "Guess you'd better hitch up the buckboard now; it always takes you s'long to do anything. The stage starts from Long's at 8 o'clock; it's about 7 now."

"Mother," Clawson said, "you ain't surely goin' to let our boy go without no notice, coursed its way down her thin cheek."

She answered his impertinence with a stony stare.

"You jest hitch up now, Hi. I'll cook you up a bite after—after he—some time tonight."

To be misunderstood always made Clawson flinch, embarrassed, as from a blow. He rose slowly, moving off the porch with uncertain step.

Tears began to rain down Mrs. Clawson's face.

Presently she heard her son coming down the stairs. Her attention followed his step as he strode into the parlor; then crossed the hall to the spare room. Her heart's pulse began to quicken as he came, hesitatingly, toward the door at her elbow. The door opened with a jerk, scrawping over the floor noisily.

Her son sprang past her to the edge of the porch, where he crouched down, bracing his head against a small upright post.

"Mother," he said, "I'm going away. But I'm not going away angry. I love Hattie Long—I can't stay where there's so much bitterness against my future wife's folks."

Mrs. Clawson muttered, as if to herself: "Of all people in the world! Amfer us in a State a thousand miles long to set ourselves right down nex' to 'em! On a piece o' mortgaged property, too! Never caring a thing about us, until they needed our water—"

She sniffed contemptuously; then fell into a brooding silence.

The sound of wheels presently reached Mrs. Clawson's acute ears. She noted the grating noise as the wheels scraped along over the broken stone, and she recalled how her son, only yesterday, had spent the morning filling in the ruts near the broken-limbed pear tree.

Mrs. Clawson's hands were icy; her body shivered as with the cold.

Her son scrambled to his feet. He came and laid a strong hand on her shoulder.

"Remember, mother, I don't bear any ill-will."

She caught hold of his hand. She cried out in broken tones: "Don't go on tonight's stage, Bobbie. Oh, Bobbie, maybe your mother kin learn to swallow her hard feelin's."

Mrs. Clawson set the lighted lantern under the tall pines where the irrigating ditch made its abrupt turn. With a long-handled hoe she quickly scraped a shallow channel through the weedy ground dividing the water and her neighbor's empty trench.

Then she bent stiffly over the stones her husband had patched into the wall in the morning. One of the stones stood up large and angular above the others. Mrs. Clawson tugged at it with yf-wah, outstretched arms. At last she succeeded in loosening it, and pushed it forward into the ditch.

The water gurgled and sped through the opening to form itself into a slender little stream.

Mrs. Clawson now seizing the lantern, held it at arm's length for a careful survey of the top of the wall. A larger, heavier stone hung near the newly made opening. This she succeeded in dislodging also. And when the water flowed

over the bank in a darker, thicker stream, at last trickling down into Mary Long's trench, Mrs. Clawson chuckled grimly.

Certainly it would surprise no one that through a loose wall water should find for itself an opening, nor that afterward the refreshing stream should be allowed to pursue its own beneficent way.

Mrs. Clawson continued to laugh as she slung the lantern over her arm and picked her steps across to the tool shed, where she had found the hoe half an hour earlier.

It had grown very dark. When she started down the hill she could hardly see three feet before her.

"I come after yeh, Sue," her husband's voice said out of the shadow of a maple tree. "Is there anything the matter w' yeh?"

"Nothin' that I'm aware o'," she replied, in a noncommittal tone.

"Yeh ain't sick, are yeh, Sue? Well people don't wander around after dark."

"People should mind their own affairs, father," she replied.

"Would yeh mind my takin' the lantern, Sue?"

She thought she heard a note of covert triumph in his voice.

"Take it if yeh want," she spoke indifferently. "I'm cold. I want 'o git back to the house."

He took the lantern from off her arm. She watched him curiously as his dark figure stumbled up the hill and stooped over the broken wall.

When he returned to her side, he said: "Why didn't yeh tell me, I'd done 'a' for yeh."

"Done what?" she asked.

He burst into a laugh. It was the first laugh of unalloyed satisfaction he had enjoyed for years.

She clutched his arm.

"I expect yeh'll hold that over my head like the sword o' Damocles all the rest o' my life. That wall broke itself, Duncie!"

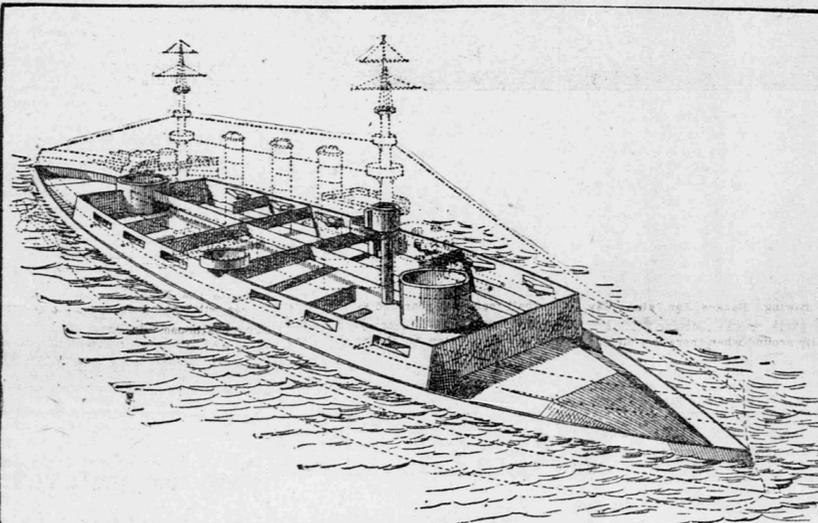
They hurried down the hill. He was in the lead tonight, holding the lantern down close to her feet.—The Argonaut

WARSHIP CONSTRUCTION FOR HEAVIER GUNS

BOSTON, May 16.—It is an old complaint against American men-of-war that they are overloaded with more guns and heavier guns than they ought to carry. This was the criticism launched by British officers against the wooden frigate Constitution in the years before the war of 1812. Now it is heard again against the steel ships of our battle line, and the recent development of some weakness in the gun deck of the Maine is eagerly hailed as proof that this criticism is a just one—that the hulls of our warships are not strong enough for the weight and stress which they must bear.

As a matter of fact such mishaps as that to the Maine are extremely rare in the United States naval service—more rare, perhaps, in that service than in any other in the world. The fleet which boasts the Oregon has not been plagued by weaklings.

Since the battle of Santiago a wonderful advance has been wrought in the power of American naval guns. Take the 12-inch forty-five-ton rifle, for instance. Five years ago this weapon, with the powder then in use, sent its projectile rushing out of the grim muzzle at a velocity equal to 2,100 feet a second, and with a muzzle energy to equal to 26,000 foot tons—that is, the energy developed by dropping 26,000 tons one foot. But the improved 12-inch rifle, like that with which our latest battleships are armed, gives its projectile a velocity of 2,800 foot seconds at the muzzle of the gun, and develops the enormous muzzle energy of 46,000. This new weapon is longer and heavier. Instead of forty-five, it weighs fifty-two tons.



A Typical Battleship Without Her Superstructure. Drawing of the Rhode Island Showing the Turtleback Protective Deck.

place of the other four 6-inch rifles of the Maine they will have eight 8-inch guns—of course very much more weighty and more powerful. The projectile of a 6-inch rifle weighs 100 pounds; the projectile of an 8-inch rifle, 250. Four of these 8-inch rifles in each of the new ships will be contained in the novel superimposed turrets mounted on the two main 12-inch turrets fore and aft.

In view of the difficulty with the Maine, it may be interesting to note the extraordinary precautions which Uncle Sam takes in his newest ships to see that his mighty guns are securely fastened to the vessel that must bear them. Battleships like the Rhode Island and New Jersey are practically as well as theoretically floating forts and must furnish stable and well protected gun platforms. The heavy protective deck, a "turtleback" of nickel steel, serves as the bomb proof of the fort, but also as the subfoundation for the gun mounts. The novel superimposed turrets, each containing two 12-inch and two 8-inch rifles, rise from the main deck but turn upon a cylindrical steel foundation which rests upon the protective deck. From the protective deck also rise the barbettes, cylinders of 10-inch steel which protect the turning gear and ammunition hoists. The amidships barbette for the 8-inch rifles are sustained by bulkheads which rest upon the protective deck. But the most massive framework of the whole ship is really that which upholds and protects the huge 8 and 12-inch rifles in their circling turrets.

So, also, with the broadside guns of the Rhode Island and New Jersey. They are lighter weapons, it is true—100-pounders of six-inch caliber. These guns stand upon the gun deck, sheltered behind armor six inches thick. The deck beneath them, to which the gun mounts are attached, is powerfully strengthened. This deck is of steel plate to begin with. Underneath at a distance of several inches is fastened an extra plate. The interval between these two plates—the deck plating and the layer below it—is filled in solidly with hard wood and bolted through again and again, making an

extraordinarily heavy cushion. Then this thick deck beneath the broadside guns is supported by stanchions, that is to say, steel posts, by steel knees, or by partial bulkheads and brackets. Some of these steel stanchions which tie the gun foundation to the protective deck are five and one-half inches in diameter.

This brief description is sufficient to show the care that is being taken to have the guns of the Rhode Island and New Jersey give a good account of themselves in an emergency, and to fall neither in target practice nor in the sternest work of actual war. Since the new Maine developed a weakness the Bureau of Construction and Repair has taken steps to see that adequate strength is provided to withstand the recoil of the new guns, and it is worthy of note that the cruiser Des Moines, now being completed in the same yard, accurately meets these latest requirements. Naval designers and shipbuilders realize now perfectly well that the shock to which a ship's structure is exposed when a modern gun "goes off" is almost the striking shock of a locomotive.

There are ingenious devices to "take up" the enormous recoil of one of these high-power rifles. But even then the shock transmitted to the deck on which the great gun stands is a severe one. Something more is required to meet this shock than mere massiveness of construction. The materials that are to be worked into these battleships must be of flawless quality. Here again the Government insists upon precautions that seem almost extravagant. Special inspectors are stationed at the works where the steel plates, beams and so forth, are produced, and all this steel is subjected to both chemical and mechanical tests of great severity. Indeed, so important is this inspection regarded that the Navy Department issues a book of general instructions for its inspectors and others concerned, and these instructions cover over twenty printed pages. Each object made from accepted material must be marked with four separate stamps—first, the stamp of the inspector; second, the stamp of the man-

ufacturer; third, the identification number, and fourth, the regulation Government stamp; and no material is allowed to go into a navy ship unless it bears all these four.

Even after the steel has been inspected and approved it may be rejected at the building or the navy yards. Standard medium steel must have a tensile strength of at least 60,000 pounds and hard steel of 75,000 pounds, and a piece of steel eight inches long must stand an elongation of 25 per cent at rupture. Steel rods from which rivets are made must be capable of bending over flat on themselves without showing any cracks or flaws on the outer surface. Castings for stems, stern posts, turret tracks, and so on, weighing more than 1,500 pounds, must be raised to a height of at least ten feet and be allowed to fall freely upon a concrete or macadamized road surface, while castings weighing less than 1,500 and more than 1,000 pounds must be let fall from a height of not less than twelve feet. After the material has passed this rough-and-ready test, it must be suspended in chains, "and hammered all over with a heavy sledge hammer," and the navy book of instruction adds, almost ironically, "No cracks, flaws, defects, or weakness must appear after such a treatment."

Every lot of steel which is being worked into the Rhode Island and New Jersey—these ships are good examples because of their class they are further along—has had to pass this rigid inspection, these strenuous tests of a thorough-going Navy Department. If, in spite of these precautions, a little defect did somewhere appear, when high-powered rifles are fired at an unwonted elevation, it would perhaps not be surprising. But the development of even such small defects in our navy has been the exception and not the rule, and it is quite possible that with the help of precautions which grow severer and more exacting year by year the new steel battle line of the United States will even improve that reputation for freedom from serious mischance which has made it the envy of foreign services.

When Love Saw Duty Clearly

Two narrow ways, by merging lines, Approached the land of Beauty; The one, all bowed, Love pursued; The other, open, Duty.

And Love was laughing, tripping on, With maiden thoughts beguiling, The tedious miles to Beauty land Where Sweetheart: Hope was smiling.

While Duty walked with measured tread, By long, unhalting paces, As one who knows no right nor left, But forward ever faces.

At length a sound arrested Love, And, through the tangle peering, She spied the form of Duty there, The fateful juncture nearing.

In fear she halted, crouching low Beside the fragrant brambles, As Duty paused to view the land Of restful, shady rambles.

Then Love sped on; but Duty, too, As if by instinct, started, Love thought to stop; the thought at once To Duty was imparted.

For, through the tangle, fearful Love Saw Duty only dimly— A fierce, relentless, monstrous thing, Blear-eyed and leering grimly.

At last in anger Love rushed on, Resolved on sheer defiance, If that should fall, there still was choice Of death before compliance.

She reached the fateful meeting place, And stood a moment trembling, Then nerved herself to face her foe, Her passion ill dissembling.

But, lo! his look, though firm, was mild, And even kindly seeming, About his lofty, handsome head, The light of peace was streaming.

Then Love, discerning, true to self, Stretched out her hand to Duty, And, leaning on his arm, went forth Into the land of Beauty.

—Clarence Ousley.

AUTOMOBILE TERMS.

A FRENCH publication suggests that a great service might be rendered the cause of automobilism by the formulation of a universal language of the sport and pastime, or rather a code of the expressions most frequently used in automobilism, and a congress under the auspices of the Automobile Club of France is recommended to provide ways and means for putting the project of formulating such a code into effect. The idea is to derive expressions for describing the features of a car and the troubles and derangements to which it is liable, the terms to be selected from the most suitable expressions in the leading European languages, and to be modified to suit the requirements of universal use.

One of the important advantages of such a codified system of universal expressions would be the manner in which it would facilitate international automobile touring, which is rapidly extending in Europe; at least this advantage is expected by the originators of the idea.

It is questionable, however, whether automobilists would deem it worth while either to learn the code or to carry and consult a book containing it, as much of the conversation necessary in touring does not relate to the automobile at all. It can hardly be conceived that a universal auto language would be of as much practical importance as a universal commercial language, and, as all the universal commercial languages that have been tried have failed in the end, a universal auto language would have no greater chance of success.

On the other hand, an international automobile dictionary, compiled with the approval of the leading national automobile clubs, would serve a practical purpose, inasmuch as it would tend to check the looseness of expression now prevailing, and definitely establish the meaning of different terms which are now used in varying senses. It is somewhat doubtful, however, whether the time has come for compiling such a dictionary, as the list of terms is still being added to very rapidly. Of course, the dictionary could be revised and added to from time to time, and thus kept up to date.

UNCLE SAM WILL OFFER A MILLION ACRES FREE

Uncle Sam is preparing to open to settlement 1,000,000 acres of public land on the main line of the Santa Fe Railroad in southern California, and from present indications it is reasonable to expect a tremendous land rush when this slice of public domain is opened to entry in June. The opening of this territory, which comprises a strip twenty miles in width and between 200 and 300 in length, is under direction of the officials of the local land offices at Los Angeles and Independence, Cal., and Carson City, Nev., and at each of these points thousands of letters have been received from all parts of the country making inquiry as to details regarding the new Mecca.

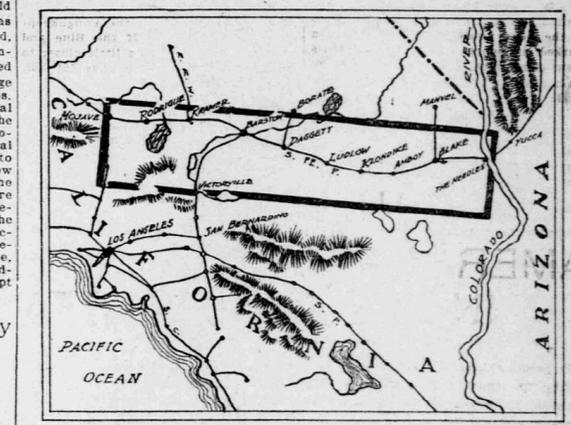
The General Land Office at Washington is rather at a loss to account for the tremendous interest which has been aroused in the territory to be opened in the Golden Gate State, and officials express the fear that many persons who go West to find homes in this domain will be grievously disappointed when they discover that the holdings are almost exclusively desert land and of little value without the expenditure of

considerable money for improvement. It is conceded that this land has a future, but little can be accomplished until the transforming power of irrigation has been called into play.

A surprising circumstance in connection with the present excitement over this new territory is that similar land in this identical locality is and has been open to settlement for some time past with few takers. Perhaps the unusual state of affairs may best be explained by a brief review of the events leading up to the present opening of territory.

In accordance with the usual custom governing railroad construction in the West, the United States Government made grants of land in southern California to the Atlantic and Pacific and Southern Pacific Railroad companies, in each case the Government retained half of the land along the projected line of railroad and relinquished the other half to the railroad company. For the sake of uniformity the Government kept the sections in each township designated by even numbers, and let the railroad people have the sections designated by odd numbers.

It happened that in the stretch of territory between the town of Mojave and the Colorado River (the scene of the coming land rush) the grants to the two railroad companies overlapped, and thus Uncle Sam kept a full half of the land while the two railroad corporations were obliged to divide between them the odd-numbered sections—each company receiving, it will be seen, one-fourth of the whole amount of land. The Southern Pacific Company still holds its land, or such portion of



Bernardino, Los Angeles and San Diego. Other settlements in the newly opened territory include Rodrigue, Kramer, Daggett, Ludlow, Klondike, Amboy and Blake. The end of the Sierra Nevada range of mountains touches this territory, and Barstow is over 2,100 feet above sea level, but this altitude is exceptional. Mojave being but 275 feet, Amboy less than 600 feet, and the Needles, on the boundary line between California and Arizona—a town of 700 people—only 46 feet. As has been said, the possibilities of this territory are dependent almost solely upon irrigation; and while the section is not likely to be made the scene of any governmental irrigation project on a large scale, there is some chance for private irrigation work, there being in or near this strip of land several streams and bodies of water of fair size.

The Land Office officials at Washington had not anticipated any such rush for the new lands as now appears to be threatened, and have made no arrangements to send a force of clerks from Washington, as was done at the time of the land rush in Oklahoma. The management of the distribution in southern California will therefore rest solely in the hands of the registers and receivers of the land offices at Los Angeles and Independence, Cal., and Carson City, Nev.

The head of a family, or a person who has arrived at the age of twenty-one years, if a citizen of the United States or intending to become such, may acquire title to one quarter section, 160 acres, by establishing and maintaining residence thereon and improving and cultivating the land for the continuous period of five years. A residence elsewhere than on the land entered for more than six months at any one time is construed as an abandonment of claim.

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