If They Did It in Los Angeles—

Effect of Optimism and a Smile on Real Estate—From $12 to $40,000 Per Acre

By FRANK GIOLMA

"I DON'T know whether to sell this house or not," said my host as we sat chatting in the sitting-room after supper. "Of course it's fifteen years old and just a frame dwelling, the same as you'll see in any residential section in any Western city, but my wife and I have seen a lot of history made down here in Los Angeles since we built it and, well it's home. Still, $20,000 is a lot of money and that's what I was offered this morning."

"You were pioneers in this section weren't you?" I asked.

"Yes, so far as this land was concerned," he replied. "We came here in 1886 and bought forty acres on easy terms at $12 an acre. And that wasn't cheap in those days you'll understand. The land was just desert, and most of the time too dry to grow anything. We started in raising garden truck.

"I used to be out on the land by four in the morning and my wife used to hitch up the horse at six and take the vegetables to the city and peddle them most of the time from door to door.

"There was seven miles of country, mostly desert, between us and the city those days. Just a country mud road with, here and there, a struggling orchard or parched derelict garden.

"Many's the time I almost lost heart and made myself get used to the idea that the $480.00 I had paid was gone."

Different Conditions

As I listened I thought of the different conditions today, with valuable private residences stretching for more than five miles on every side and well kept boulevards and paved streets and a great city growing out towards them.

"What did you eventually do with your ranch?" I asked.

"Sold it gradually, all except this house," he answered, "in city lots at an average price over all of $40,000 an acre. The early sales didn't come near that, but we held on, just as soon as we saw people were beginning to come here and wanted to buy. Vacant lots round here today sell easily at, from $14,000 to $16,000 apiece, and of course those on the boulevard go as high as $20,000."

"And if it's a fair question," I asked, "what have you done with the money you got? Reinvested it in 5% bonds and 8% mortgages?"

My host wrinkled his forehead in surprise when he heard my question.

"But why should I do that?" he asked.

"I made the money here in real estate. Los Angeles turned $480.00 in a few years into $160,000 and so naturally I put the money back into land again and again, each time a little farther out; just keeping back enough to put my boys and girls through college and start my sons in business and settle some money on the girls when they married. Surely I should have been foolish to bury it in 5% bonds or mortgages.

"My boy, investments like those are only fit for old men who have lost courage, or young ones who lack confidence in their own city, and of course, that means in their own business acumen. And besides, what would happen to a business if it were skinned of every dollar it made? And, a city is, of course, a business, with every citizen a shareholder."

"I have been told," I remarked, "that you Angelenos had not always this splendid adamantine faith in your city and yourselves. Do you remember those times?"

Gloom Worshippers

"Surely," he replied. "I remember those early days when we came mighty near pulling up stakes, rolling our blankets and quitting. You know you'll always find a certain number of people in any community who lack confidence, who haven't got any grit, who can't stick a few setbacks, and are only happy when they believe the prophecies of disaster are coming true. Well, Los Angeles was such a dead town in the '80's that the gloom worshippers had it all their own way, and believe me, Jeremiah had nothing on them. Never mind whatever a man started to do or suggested, they'd gather round like a lot of mutes at a funeral and chant in chorus 'It Can't Be Done.'

"You see, we hadn't anything to brag about; just a desert and sunlight; no water, no harbor, no natural resources.

"San Francisco, away to the north of us, seemed obviously destined to be the only large city in these parts. It had a harbor second to none, and water, and all the sea-borne trade, and it was growing bigger every day, while Los Angeles was growing smaller. The only callers my wife and I used to have were neighbors coming in to say good-bye and asking us to keep an eye on their houses, and visits like those aren't calculated to make a man bubble with joy.

Something Happened

"Then just as I began to fancy we'd soon be the last white people in Southern California, something happened. I don't know why, I wasn't in the business set, you'll understand, just a truck gardener. But almost suddenly people seemed to begin to think that things were on the up-grade. Then I noticed that people gradually let up talking blue ruin and gloom, and began to be optimistic as to the future.

"At first we all seemed afraid to believe that good times were coming, kind of mentioned it as a joke, you'll understand. Then people stopped leaving and others came round looking for land on which to live, and soon there was work offering for everyone.

"Mind, that didn't happen in a day or a week, but the tide surely turned well within a year. One of the men who helped to put it over explained it in this way: 'Yesterday,' he said, 'we were like a storekeeper who told all his possible customers to keep away, as he only had shop-worn and mouldy goods to sell. Of course, they believed him, and he sold nothing. Then our population of 50,000 started to sell the wish that they had to stay in Los Angeles to possible home-seekers elsewhere, and so the people began to come here.'

50,000 Salesmen

"And that's really what we became—50,000 salesmen all trying our own way to attract newcomers to our city. That the idea was worth while is past argument, for we have 775,000 citizens today, work for all, and money for every project we desire.

"As I said just now, I don't know just how it begun. I guess just a few business men got together and started the idea, the rest of us jumped right in and pushed it along. All they asked was that we smile and work as if we believed good times were coming and Los Angeles was destined to be a big city. Wouldn't we have been fools to have done anything but help all we could? That $480 sunk in the place, not a mighty lot, but all I had, and what kind of a poor fish would I have been if I had pulled a sad mouth when a smile and optimism might bring that $480 back to me with a few dollars of profit. And as a matter of fact, faith in Los Angeles, the combined massed faith of every man and woman and child has actually turned that $480 into much more than $160,000.

Anyway, it was a smile or bust with us in the 80's, and we chose a smile.

"Some people, not Angelenos, still talk about a boom and shake their heads. Well, it's lasted for more than twenty-five years and is still going strong. We added 80,000 new permanent residents last year and built 18,000 homes. The value of all buildings during 1922 was a little more than $107,000,000. Just think of that sum being spent in a city and what work it means for builders, mechanics, and as they finish, house furnishers and furniture dealers. And then the clothing and feeding of those 80,000 newcomers, apart from the droves of tourists who are coming and going all the time.

"Say, we are getting industries, but don't you think that this city building we're busy on is a mighty good business itself? Some people say, again not Angelenos, of course, that people will stop coming some day. Will they? If times are good they come here to retire, and if times are bad they come here to make a living. Like a transportation company, we get them both ways."

While he was speaking, his wife ushered in a dapper business man of, I should judge, some forty years of age. He was introduced as the traveling representative or supervisor of one of the large insurance companies.

"Los Angeles!" he exclaimed, breaking with a laugh into the conversation, "I've been here twice a year for the last ten years and I've come to the conclusion that Los Angeles isn't a city at all.

365 Square Miles

"A city? Why, who ever heard of a city with an area of 365 square miles, connected by mountain passes and containing within its bounds an olive orchard of 1,500 acres? Whoever heard of a bunch of 50,000 men located in an old-world Spanish town building the place into a great home city of 800,000 people? Show me any other tourist resort that has a steady flow of 1,000 tourists a day all the year round. And not satisfied with that, you've added 80,000 permanent citizens to your town.

"No, Los Angeles isn't a city, it's an idea; a word so drummed into the ears and minds of not only America, but all the world in general that it's become an epidemic. Go into any city in America or Europe, and let it become known that you've been in California, and a hundred men and women will gather round to ask questions about Los Angeles.

"Los Angeles, as we know it, started with a battery of 50,000 salesmen, all selling the one word that appeals to ninety-nine out of every hundred people who are foot loose and want to go over the hills and far away, and that one word is 'home.'

"'A home city,' that's what Angelenos started out to sell, and that's what is still pulling the people here.

"Good business? Well, Babson's Industrial Report of the whole of America says that conditions in Southern California are good, due to the new people and new money which are continually pouring into the State; and it contends that just so long as people still come here, conditions will remain good. Compare that report with what it says about other sections of the continent, and you'll agree that this so-called twenty-five years' boom is mighty good business anyway.

Manufacturing Industries

"Now, of course, apart from manufacturing everything they can for their own consumption, they're beginning to manufacture for other parts of the West, but the business men still recognize that their right bower is the 'home town idea.' Why, one association, The All-the-Year-Round Club, is spending $150,000 in advertising their Summer! Think of that 117 degrees in the shade, and they're going to put that across, too."

Suddenly turning to me, he asked, "How are conditions up in your country?"

I guessed he was pretty well posted, so replied, "Fairly good, and I believe on the up grade."

"And you're right," he answered. "You've got so much behind you, you've only got to let people know and you'll start the flow northward. But don't mind me saying so, you're slow on advertising, and you lack faith in yourselves; at least, you people in Victoria do."

"You've been there?" I asked.

"Surely; my inspection trips take me to Vancouver and Seattle twice yearly. Three years ago my wife came along with me, and we took the boat from Vancouver over to Victoria. My wife fell in love with a little dinky bay out in Saanich, you know the strawberry land. As we intend to come out and settle on the Pacific Coast soon, and down here is too hot, and there was an old sale notice tacked up on a tree, I went and asked about the land as soon as we got back to Victoria.

"Well, believe me, I was the most astonished man in America when the owner told me not to buy, as nobody was buying just then. Of course they weren't if the people who should know conditions were advising them not to."

"Did you buy?" I asked.

"I did not. Just put my cheque book back in my pocket.

Migration North

"But the migration North is beginning. Already San Francisco is beginning to feel the overflow from Los Angeles, and it will spread up to Seattle, Tacoma and over into British Columbia if you people only let the newcomers know that they will be welcome.

"Remember, Los Angeles has outgrown the 'home town' idea, although they won't own to it down here. There's nothing restful about a city where $3,000,000 worth of automobiles can be stolen, and that's what happened in Los Angeles last year. There's a mighty big army of well-to-do people on the continent today looking for a real home town, and it seems to me that you people in Victoria have the goods. But if you want people to come and live there, you've got to let them know what you've got and that they will be welcome, and I mean by welcome that they'll be treated the same as you yourselves.

"Anyway, the future lies in your own hands. Of course, if you are going to warn newcomers off, they'll stay away, and Vancouver, Seattle and Tacoma will absorb the people as they come North, as come they will.

"What's the population of Victoria today—I mean the population of Victoria and the towns or villages adjoining it?"

"About 50,000," I answered.

A Tip From Los Angeles

"Just what Los Angeles had when she began to smile and tell people to come and live here. Fifty thousand people. Think what a selling force that is—50,000 women and men—I put women first because they count most—all doing their bit to bring in new settlers. Take a tip from Los Angeles. Smile and get faith, and you'll not only get newcomers to help pay for your city, but you'll have all the work you want for the boys and girls at home in their own home town."

"When," I asked, "are you going to buy that bay out in Saanich?"

"Just as soon as you people get faith in your own place," he answered, "for then I know it will never get cheaper."

"Then you'd better get busy," I replied, "because some of the long-headed amongst us are already beginning to act."

"If that's so," he answered, "I'll run across to Victoria on my trip north and get that bay, for once things begin moving they'll move mighty quickly with the crowd we've got out here."

German Coal Octopus

Since the French advance into the Ruhr much curiosity has been aroused as to the famous Kohlensyndikat, which has fled with its books and secret files to Hamburg. People want to know what it is and what its functions are, writes H. G. Cardozo in The Daily Mail.

Ample information as to this all-powerful German coal syndicate, one of the most powerful of its kind in the world, is in the possession of the French Government.

The Kohlensyndikat, which disposes of about 80 per cent of all the coal mined in Germany and sells and transports German hard coal, coke and lignite throughout half Europe, was founded in a modest fashion in 1893, when it received its present full official title, which is the "Rheinisches Westphalisches Kohlensyndikat."

It is a limited liability company, but all its shares are held by the great coal producing companies and also by the steel firms, which are its greatest consumers of coal and coke.

Since its foundation it has split into three minor organizations; one, the Kohlen Kontor, for the sale and transport of coal in Germany itself by the River Rhine and its canal system; the second, which sends coal down the Rhine towards Holland; while the third sells coal in Belgium and before the war had its main seat of operations at Antwerp.

The Kohlen Kontor, by its articles of association, was strictly limited to minor operations. Any contract over 10,000 tons was reserved for the parent body. This company has one of the largest river fleets in the world, consisting of over 800 large coal barges and 130 steam tugs. Among its founding members are the famous firms of Stinnes, Haniel and Harpen.

The Lower Rhine Syndicate has a river fleet of 100,000 tons burden and 100 steam tugs. It has the exclusive right to sell coal in Holland and for export from Dutch ports. Finally, the Belgian Syndicate, which is the youngest of the three, sells coal in Belgium and for export, but since the war it has been obliged to work for its Belgian owners only.

The Kohlensyndikat and its three subsidiary companies live only on the sale and transport of the coal produced by the mine owners, who have always been extremely jealous of its power and unwilling at any time to give it a long charter.

The last of these agreements expired in 1922, and was then renewed for the short space of one year. Normally, therefore, this huge organization ought to come to an end on March 31 next, when all its constituent companies, be they coal companies or river navigation companies, will recover their entire freedom of action.

It is thought that the French occupation of the Ruhr, which will certainly not be concluded by the end of March, will mean that no efforts will be made by the Germans to refloat the syndicate or obtain for it an extension of its charter.

A Road in Ireland

From Killybegs to Ardara is seven Irish miles,
'Tis there the blackbirds whistle and the mating cuckoos call,
Beyond the fields the green sea glints, above the heaven smiles
On all the white boreens that thread the glens of Donegal.

Along the roads what feet have passed could they but tell the story,
Of ancient king and saint and bard, the roads have known them all;
Lough Dergh, Doon Well, Glen Coluceille, the names are yet a glory,
'Tis great ghosts in the gloaming remember Donegal.

The harbor ships of Killybegs glistened with Spanish sail
The days Spain centred round the world and held the half in thrall!
And Ardara has writ her name in the proud books of the Gael,
Though sleep has fallen on them now in dreaming Donegal.

THE STARS IN THE SKY

By R. K. Young, of the Dominion Astrophysical Observatory

WHEN one examines the heavens on a clear night he may see two thousand or perhaps three thousand stars in the sky. With a good pair of opera glasses one may see ten stars for every one that can be seen with the unaided eye. If one takes a telescope he can see still more stars, and the larger the telescope the more stars become visible. Astronomers estimate that they could photograph at least one hundred million stars.

Each one of these stars is a sun, and on the average is bigger and brighter than our own sun. The most superficial examination will reveal the fact that the number of the stars is not the same in all parts of the sky. Not only are they irregularly distributed, but in addition whole regions seem to be richer in stars than other regions. Another point that may be noticed is that they differ in brightness; some are bright and others at the limit of vision; some seem to shine with a ruddy light; some are rather yellowish and some white or blue. Each one of these subjects, the distribution, the brightness, the color, has been the subject of the most careful investigation and has yielded results of the most fascinating character.

Significance of Color

In the present article we are going to consider the last one—the color of the stars. What is the significance of this difference in color? It is a matter of temperature. Everyone is familiar with the fact that when a piece of iron is heated, it first glows dull red, and as the temperature is increased it gets whiter and whiter. The blue stars are the hottest, the white stars not quite so hot, the yellow stars cooler and the red stars, such as Aldebaran and Betelgeuse, still cooler. (The word cool is possibly out of place in connection with a star, as even the reddest are at temperatures of several thousand degrees.) Even if one had no instruments with which to study the color of the stars, he might come to this conclusion, but investigation could not go very far without some instrumental aid.

The instrument that is par excellence for this purpose is the spectroscope. This instrument, which has been described at other times in these columns, arranges the star's light in an orderly sequence of colors, beginning at red at one end and running through all shades of orange, yellow, green, blue to violet. There are thousands of shades of red, thousands of shades of orange, thousands of shades of each of the so-called primary colors. The eye receives all the colors at once and gets an integrated, a summation effect. To illustrate the great improvement effected we may make use of an analogy. Suppose we had a library of a million volumes and that these were all tossed in a huge pile and viewed from a distance. One would obtain but a very faint idea of the contents of the library. Now let the pile be set in order and classified on the shelves and it would be put in somewhat the same order as the spectroscope puts the light of the star. One might, for instance, be able to say that certain volumes are missing. It is precisely this thing that the spectroscope does for the stars' light. Certain of the colors are missing. We don't mean, for instance, that a whole color such as blue is absent, but a particular shade of blue, or that such a color as red is missing, but a particular shade of red. To make this clearer, imagine the stars' light drawn out into a ribbon. This is what the spectroscope does. The ribbon is red at one end and shades into blue at the other. Imagine the ribbon divided into millions of parts by lines drawn at right angles to the length. Each one of these divisions represents a color, and when we examine the light from the stars we find the ribbon is not continuous, but that there are gaps in it.

The astronomer does not refer to these gaps by saying a particular shade of color is missing, but he numbers the colors in order. The number 8,000 A.U. refers to the deep red and the number 3,900 A.U. to the deep violet. You may now, if you like, imagine the 4,100 numbers between as representing steps. Such is the refinement of the measures that we may say the line 4056.286 is missing. If you like to carry the analogy farther, one might imagine the whole numbers to correspond to 4,100 volumes and the decimal points would refer to the 286th page in volume 4,056. Ordinarily, however, when the colors are absent from a star it is a larger gap than just one page. We refer to this as the width of the line. Usually it will be 300 or 400 pages and may be several volumes.

When certain volumes in a library are missing we are told someone has them out. Much the same thing takes place in regard to the light from the stars. The light starts out from the inner and hotter light-giving part of the star with a full complement of colors, with all the volumes complete, as it were, but it must pass through the outer layers of metallic gases which absorb certain colors, and, just as in the case of the library, certain people always take out books on fiction, others books on travel, others books on science, and so on; each element has particular affinities for certain colors. Iron takes out its set, sodium a different set, helium a third set. While in the case of people taking books out of a library there may be clashes, two people wanting the same book, we have been unable to discover any such clashes in the elements. Each has its own set of colors which it absorbs, and this set is distinct from that of any other element.

Types of Stars

The spectroscope was first applied to the study of the stars by Sir William Huggins in England and by Secchi, Vogel and Scheiner on the Continent. These pioneers in the subject recognized that each star was more or less a law to itself, but that there were similarities in the spectra of the stars which enabled them to divide them into classes or types. These types correspond roughly to the colors. The classification now most in use and one which seems able to stand the test of time was published from the Harvard College Observatory. They use the letters O, B, A, F, G, K, M, N, R to denote various classes. These are subdivided again in numbers. Thus we speak of a star of type A2. This means a star of type A two-tenths of the way towards type F. The classification is based upon the character of the absorption colors or lines present and chiefly on the changes in intensity of the lines due to helium, hydrogen and calcium and the general intensity of the lines due to metallic vapors. We extract the description of a few of the types from Harvard Annuals:

Class Bo. Typical Star Epsilon Orionis. The hydrogen lines are O.3 as intense as in class Ao. The Zeta Puppis series is present, but much fainter than in class Oe5. Oxygen lines are strong. The line 4,649.1 is slightly more intense than the helium lines 4,026.2 and 4,471.5, which are equally strong. The triplet 4,069.0, 4,072.3 and 4,075.9 is well marked. Lines 4,649.1, 4,116.3 and 4,089.0 reach their greatest intensity in this class and decrease very rapidly in succeeding classes of spectra.

Class Ao. Typical Star Alpha Canis Majoris. The hydrogen lines are at their maximum intensity, and the calcium line K is O.1 as intense as H Delta or less. On plates having sufficient dispersion the calcium line H at 3,968.6 is separated from Hv Epsilon 3,970.2 and is nearly as intense as K. Line 4481.2 due to magnesium is the strongest except the hydrogen lines and line K.

Class Fo. Typical Stars Delta Geminorum and Alpha Coronae. The lines of hydrogen are about O.5 as intense as in Alpha Canis Majoris. The line K is as strong as the compound line H and H Epsilon and about 3.0 as intense as H Delta. The lines 4,305.8, 4,308.0 and 4,309.6 and other lines which form the absorption band called G are faint and inconspicuous.

Class Go. Typical Stars Alpha Aurigae and Beta Hydri. The spectrum closely resembles that of the sun.

In this way Harvard describes the types of spectra, not only for Bo, Ao, Fo, as I have done here, but also for the divisions Bo, B1, B2, etc., Ao, A1, A2, etc.

Reading Stars' History

If this classification were a purely arbitrary one and merely served the purpose of enabling astronomers to describe the stars they were talking about, it would be of little value, but it also indicates, we believe, in a large measure the evolution of the stars. The beginning and the end of the story of a star is still very obscure, but we think we know pretty well the life history in those stars which show a type represented any place from O to M. The star starts, let us say, as an M-type star. In this stage it is red in color, is not very hot, at least in the outer layers, and its density is extremely small, very much less than that of the air of our atmosphere. The star will be of very large dimensions in this stage. Betelgeuse is a good example of a star of this class, and recent measures of its diameter give 250,000,000 miles, or 300 times the diameter of the sun. This would make its mean density, if its mass were equal to the sun, one over twenty-seven million times the sun's. We believe that the masses of the stars do not differ widely, probably not more than one hundred to one. The very biggest stars will not be more than one hundred times as massive as the smallest. In this stage of its evolution the star is a baby, but at the same time we call it an M-type giant.

Stars' Progress

The next stage in the development of the star we call the K type. This stage, of course, joins on to the M stage, but the star has become a little more dense and a little hotter and a little smaller. The heat is so intense that all chemical combinations or compounds do not exist. Still further contraction brings us to the G and then to the F type, and further contraction to the A, B and O types in turn. Passing from the M to the O type stage the stars change in color from red to blue through the stages yellow and white. Yellow in the K and G types and white in the F and A. At the same time the number of absorption lines decrease in number. The density of the star increases from a density less than one-thousandth that of air to about one-tenth that of water. The temperature rises from two or three thousand degrees to twenty or thirty thousand. There comes a time, however, when further radiation of heat does not cause a rise in temperature, but, on the other hand, causes a drop in the temperature. The reason for this is that the star has become fairly dense and the real cause of the rise in temperature was the contraction. When the star was very tenuous a small output of energy caused so much contraction that the smaller star was actually hotter than the originally larger star containing more heat. When, however, the star has become dense radiation of energy does not cause so much contraction. It enters then into what we call the dwarf stage. The types begin to reverse and the star becomes first a B then an A, F, G, K, and finally an M type star again. The finally M type star looks much like its childhood days, but it is really second childhood. The density is probably several times that of water, and it is faced with utter extinction, when it will give so little light that it can no longer be seen. Not all stars live so long a life as we have indicated. If the star is very massive it may pass through all the stages, but it is believed that many which are smaller reach their maximum temperature in passing from the giant M stage to the F and then begin to cool. A little more massive star may reach the A-type stage before beginning to decline, and only the most massive reach the O stage.

Each of these various aspects in a star's life history shows itself in the character of the colors present, and especially in the missing colors in the spectrum. Critical study of the lines missing and their widths enables the astronomer to find out the densities, the luminosity and the general conditions existing in the star. They have not yet been able to find the masses. By other means we know the masses of a few stars, but of the stars in general we have no way of telling how massive each star may be. This remains a problem for the future which gives some promise of solution.