

NEW USE OF MOVING PICTURES

Moving pictures are being put to new use, which will result in the saving of life and limb. Professor Munsterburg of Harvard is responsible for what is known as the cinematograph nerve test, which is said to reduce motor car accident in the United States to a minimum.

The tenement mother is being relegated to the background as a subject for social study. The searchlight of investigation is now turned upon the man with the white collar—the salaried bread winner of the middle class.

A Brooklyn man has been sentenced to kiss his wife at least twice a day for seven years, but it is thought that she may be generous enough to let him off with one on Sundays, so that she shall not have cause to regard it as a seven-year plague.

"Hitch your wagon to a star," said Emerson. He was too early to originate the notion of hitching a sledge to an aeroplane. This idea has occurred to an ingenious Frenchman in Algeria.

A woman in Pennsylvania was recently fined for being a witch. It is now in order for the sad experience of the western railroad to be repeated in centers of civilization, which railroad was fined for mutilating a valuable work of art in delivering a statue of the Venus Milo with its arms missing.

It is predicted that money-washing machines will be installed in banks and in department stores like those used by the government. They may not come into universal use, however, as there will always be some who have no use for clean money.

According to an authority in such matters, the life of a dollar bill is 14 months. Now will he please tell us how many microbes it maintains during that time?

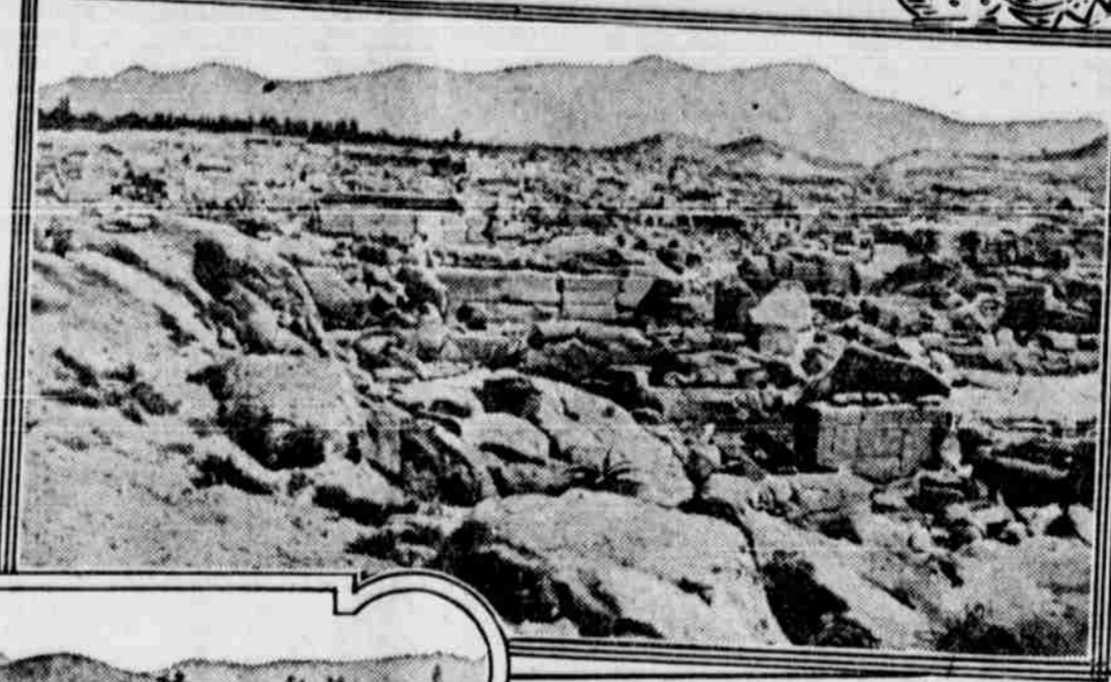
An Ohio woman secured an injunction to prevent her husband from telephoning her or making dates with her. An injunction isn't needed to restrain the majority of blasé husbands.

Lightning in Chicago struck a girl who was playing on the piano and damaged the piano. This is one of the acts which perhaps might be classed as the benevolent despotism of nature.

The DEAD CITY of CAJAMARQUILLA Charles Warren Currier, Ph. D.

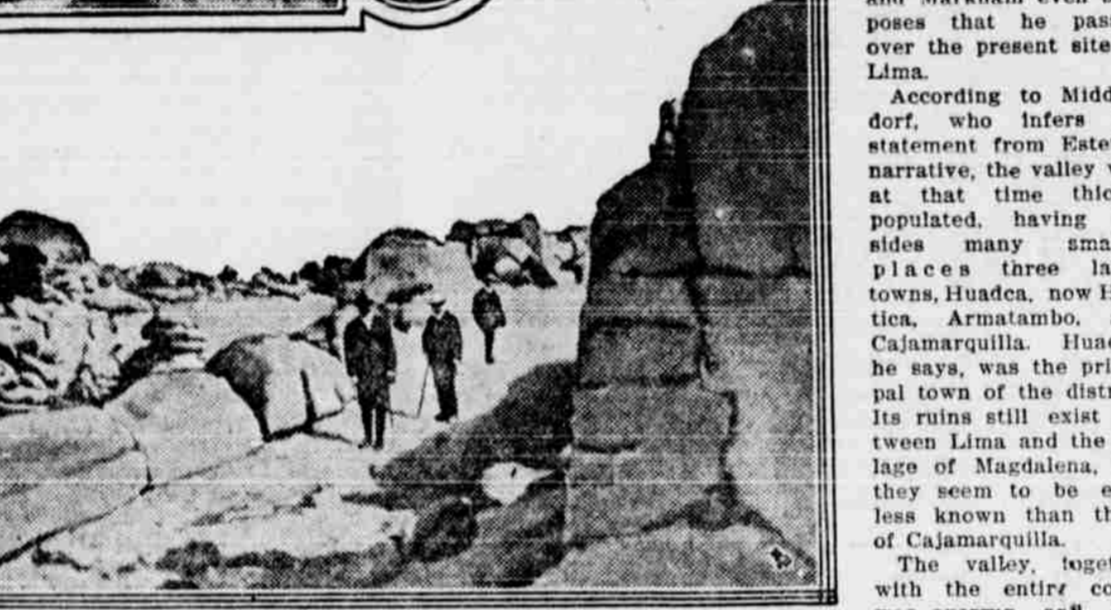
Of the thousands of people who inhabit Lima, or of the many who, in the winter months, take a run up to Chosica, on the Oroya railway, there is probably not one in a hundred who knows anything of Cajamarquilla. I was about to leave the capital of Peru without dreaming that, within a stone's throw, there were slumbering the ruins of a prehistoric civilization that had not yet passed away when Pizarro laid the foundation of the City of the Sovereigns.

The sacred city of Pachacamac is known to, and mentioned by every traveler who includes Lima within the limits of his itinerary. It has been visited and described from the days of the Conquistadores with more or less accuracy, until Dr. Max Uhle made a special study of it and published his monumental work. If these ruins of the Lurin valley are world famous, it is not thus with those of the valley of the Rimac, and if Pachacamac is



RUINS OF CAJAMARQUILLA, PERU

part of the city is buried would indicate remote antiquity, and a possible destruction of the place long before the advent of the Europeans, were it not for what Estete tells us. Miguel Estete accompanied Hernando Pizarro from Caxamarca to Pachacamac, the country to collect sufficient gold for the ransom of their unfortunate chief. He gives us the itinerary of Hernando's day by day until the return to Caxamarca. Wherever he goes he finds the country thickly populated with towns and villages, surrounded by cultivated fields of maize and orchards, with flocks of a kind of sheep. He judges that Pachacamac is of considerable antiquity, and he finds within it a certain number of ruins. No mention is made of Cajamarquilla, yet it is probable that his journey led him through the valley of the Rimac, and Markham even supposes that he passed over the present site of Lima.



STREET SCENE IN CAJAMARQUILLA

is now quite safe to visit Cajamarquilla. In fact, the thought of robbers was not connected in my mind with Cajamarquilla, until I read Squier's work.

During our brief stay among the ruins it was impossible to make anything like measurements, except with the eye, but as far as the vision extended towards the mountain we saw nothing but ruins which stretched to a great distance to right and left. Toward the river they seemed to melt away into the plain. Squier says that they cover an area of nearly a square league, and Middelndorf estimates their extent at four square kilometers. From my observations, the ruins consist of houses built of immense adobe blocks, closely adjoining each other, here and there separated by streets. Some of the houses consist of several apartments. Admission is gained through a low doorway, but nowhere is there a sign of a window. As in Pompeii, the roofs, whatever may have been the material of their construction, have long since fallen in. Outside the buildings, the soil has risen to a great height, sometimes nearly to the top of the wall, but inside the walls the depth gives an idea of the original height of perhaps 10 feet or more.

Toward the mountain, a large portion of the city is almost completely buried in the sand, which in the course of ages has come drifting down from the hills. There are within the city a few elevations or small hills, which may have been occupied by temples or forts. Pits are everywhere within and without the houses, with a width of from two to four and a depth ranging from six to twenty feet or more. Human remains in the shape of skulls and bones are found within the pits or scattered over the ground, together with bits of pottery and other articles, such as corn-cobs, which were probably interred with the dead. Some of these pits are said to have served the purposes of storehouses or granaries, while others were certainly graves. The inhabitants of the city buried their dead within or in the immediate vicinity of their houses, although the mass of the people must have used the necropolis, some distance away from the residences. Many of these pits, excavated in the hard soil, are in the form of a jar or urn, while others are square. Squier thus describes the ruins as he saw them: "These consist of three great groups of buildings and around the central mass, with streets passing between them. It would be impossible to describe this complicated maze of massive adobe walls, most of them still standing, albeit much shattered by earthquakes, or to convey an idea of the pyramidal edifices, rising stage on stage, with terraces and broad flights of steps leading to their summits."

As standing on an eminence, surrounded by the ruins, with the silence of death upon you, you look down upon what was once a city, capable of containing a population of ten or twelve thousand, you wonder what people dwelt there. The accumulation of soil and the fact that a large century or more before the arrival of the Spaniards, about the time that these lords of the Peruvian uplands imposed their rule on the Grand Chimú farther north and on Pachacamac. Though there is little or nothing to indicate an Inca occupation at Cajamarquilla, it is quite likely that after the conquest its population more or less mingled with the conquerors. To judge from the names of places in the conquered districts, the victors imposed their language, no doubt gradually supplanting the original tongue of the valleys and coastlands. Caxamarca is a Quechua name, meaning "rock city." Cajamarquilla is the Spanish diminutive of Caxamarca. The city in the Rimac valley was thus called Little Caxamarca, to distinguish it, no doubt, from that other Caxamarca to the north, so intimately connected with the sad history of Atahualpa.

Among old writers who have treated of the coast people that preceded the Incas, Don Francisco de Avila, priest in the principal village of Huarochiri, may be profitably consulted. His work was translated and published by Sir Clement Markham, in the forty-eighth volume of the Hakluyt series. Unfortunately, Cajamarquilla furnishes little data to the archaeologist. It contains no inscriptions, no works of art, and its pits have been opened and searched, probably by treasure hunters, who have long since carried off any objects of value they may have contained. Yet the ruins are of the greatest interest for the beauty of their situation, their general plan, and their adobe architecture. Cajamarquilla must rank as one of the finest remains of that mysterious pre-Inca civilization which existed on the coast between the Pacific ocean and the mighty Andean ranges. Unlike the massive ruins on Lake Titicaca, or the oft-mentioned Pachacamac, it has attracted little attention on the part either of tourist or scientist, and its history does not exist. Yet a careful study of its houses, with their apartments, of its streets, and of its burial places may, I think, throw some light on the mode of life of the primitive people that once dwelt within it. The ethnologist may also find some material in the skulls that lie scattered throughout the ruined city, or buried in its pits. As you wander through the Rimac valley and contemplate its vast solitudes and crumbling ruins, you ask yourself what has become of the population. Alas, what has become of the Indian population of the West Indies, and where are our Indians of the United States? They have melted away before Caucasian civilization. Some day a patient explorer and archaeologist may pitch his tent among the ruins of Cajamarquilla to study them in detail and force them to reveal some of their secrets. At least he may give us a plan of the city, and reconstruct it, drawing some order from its confusion. For the present, Cajamarquilla is a mystery. It has neither history nor tradition; no legends cluster around it; its existence is ignored; even archaeologists appear to neglect it. It is, in every truth, a dead city of the desert.

CEMETERY OF NIVERA NEAR CAJAMARQUILLA

Known to all, solitary Cajamarquilla is buried in an obscurity as deep as the sand that covers it, while few, very few, authors even make mention of it.

I said that I was about to leave Lima. It was the eve of my departure when I learned from Professor Saville, of New York, the well-known Ecuadorian explorer, that he had visited the ruins that very day. How I wished that I could have accompanied him! I concluded that regrets were useless, and I was about to relinquish all hope of ever seeing the old Peruvian city, when I learned that the departure from Callao of the Ucayali had been postponed for a day. Communicating this fact to Doctor Saville, he most graciously volunteered to accompany me on the morrow. It was an opportunity I readily grasped.

Thus it happened that we met by appointment at the Lima station of the Oroya railroad at 8:30 on a morning early in July. Gray clouds, as usual, hung heavily over the city when we boarded the train, which soon pulled out of the station, to begin the steep journey up the Andean slopes. A little way outside of Lima the sun was shining in a cloudless sky, scattering its rays through an atmosphere as transparent as any you could wish to see in Castile or Aragon. Here and there on the route the adobe ruins of pre-Inca civilization might be observed, for the Rimac valley is richer in such ruins than any other part of the coast.

The morning was bright and exhilarating when we arrived at Santa Clara railway station. Leaving Mrs. Saville to proceed to Chosica, the professor, his young son, and myself alighted. A little mule car, run on tracks, awaited us. It might accommodate about nine persons. We sprang to the seats, the driver whipped up his mules, and off we were on the long, sandy road between fields of sugar cane. Poor mules, cut and bleeding, how we pitied them! But in those countries animals are handled without mercy.

A run of a couple of miles or more, passing on the way the little train that is used to haul the cane, or carry the laborers, we arrived near the dwelling of the hacendado, now leased, I understand, by Chinese. Some distance from the house we alighted, to continue the journey on foot in the direction of the mountains. For a while we had a good, though dusty road, but the greater part of the journey had to be made through sandy plains, which did not improve our personal appearance, so that we presented a picture of dust and wretchedness on our return to the Hotel Maury in Lima. Our way was now and then obstructed by adobe walls, or by the canals used for irrigation, and over these we had to climb or jump. It was not long before we caught sight of the ruins, solitary and abandoned. With the exception of a herd of cattle and the mounted herdsmen, besides an occasional buzzard or vulture, no living being was in sight.

Cajamarquilla lies about 23 miles from Lima, as you ascend the valley of the Rimac, but in a side valley, in a plain among the spurs of the Andes. The valley is watered by a canal, dug, probably, at a period antedating the advent of the Spaniards. In the vicinity are several haciendas, such as Huachipa and La Nivera, and an occasional "tambo" or rural inn, where, if you care to, some kind of refreshment may be had. These, however, are hardly visible from the ruins, near which one solitary "ta" is to be seen. Years ago, when Squier visited the place, the ruins were the haunt of robbers that gave no little trouble to the Peruvian authorities, but the railroad has driven them out of business, and it

LOOKED WELL AS ANYBODY

Portly Lady Was Not Wasting Thought as to Her Appearance in Bathing. Mrs. Stockwell stood on the beach in her bathing suit. The tide was low and there was a stretch of shining sand between her and the breakers. He slender, petite girl who sat a few feet further up the beach could see her superabundant form in profile.

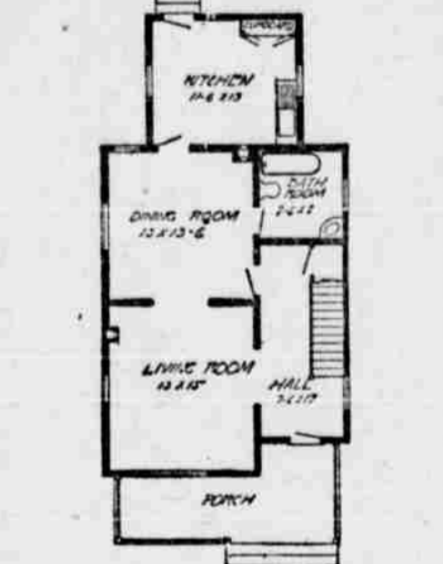
And what do you think of my suit? "All right," said the petite girl, politely. Mrs. Stockwell laughed eloquently, her portly person shaken to its foundations by the act. "Why, it's nothing but an old suit," said she, "but it's good enough. The summer's over now; I wouldn't get a new one. It's not stylish, I suppose. But I can't see as I don't look as well as anybody else. Nobody looks nice," she went on, sweeping the dainty figure of the petite girl with a stern and critical glance.

"There was only one woman here this summer whose bathing suit was becoming, and she's gone home. We all of us look funny and I don't look fatter than any one else." And with this parting remark Mrs. Stockwell rolled gelatinously down into the sea and dipped three times. To Picture Aurora Borealis. A camera which will enable motion pictures of the aurora borealis to be made has been perfected by a Swedish scientist.

IDEAS FOR HOME BUILDERS BY WM. A. RADFORD

Mr. William A. Radford will answer questions and give advice FREE OF COST on all subjects pertaining to the subject of building, for the readers of this paper. On account of his wide experience as Editor, Author and Manufacturer, he is, without doubt, the highest authority on all these subjects. Address all inquiries to William A. Radford, No. 178 West Jackson boulevard, Chicago, Ill., and only enclose two-cent stamp for reply.

A full two-story seven-room house of a style like the one here shown is very popular generally in the smaller cities. As it is only 22 feet in width this house can be built on the ordinary narrow city lot. It is just as necessary to specialize in designing houses as it is in any other line of business. Living conditions differ a great deal as the town increases in size, and we are obliged to build houses to fit the changing conditions. When a village has one



First Floor Plan.

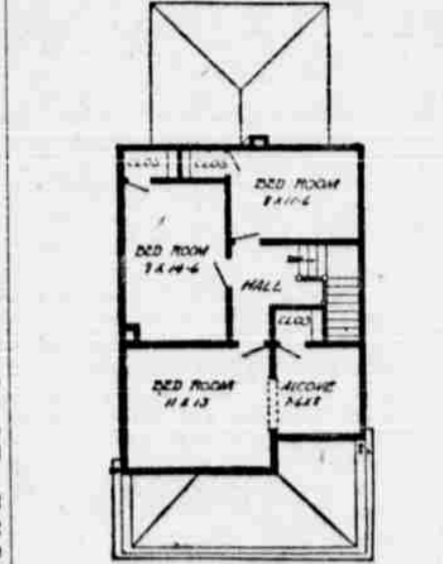
hundred inhabitants, twenty or thirty houses will hold them all. Each house may occupy a corner, and have an acre or two of land for air space and for growing fruit and vegetables. There are no sewers, curbs, or pavements; the streets are not lighted at night; there are no policemen or other public servants to pay; so the tax levy on a two-acre lot is not very



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oppressive. But when the boomers get to work, advertising the wonderful advantages of the place, the population increases in some places with great rapidity; then grafters come along with their various improvement schemes, and expenses soon mount up until a two-acre lot loses its charm when the tax man makes out his bill.

Fresh air is then sacrificed in proportion to the ambition of the village promoters, until, in some instances, one of these old-fashioned holdings is carved into twenty little



Second Floor Plan.

lots, and you get your deed from somebody's subdivision of lot number two, allotting to you thirty feet frontage, the same extending back one hundred feet, more or less, to an alley. This little burial plot then becomes the last resting place of many unsatisfied hopes of fine outlooks, plenty of elbow room, fresh air, and bright sunshine.

But the modern architect has met the many changing and shifting problems with a brave confidence in his ability to deliver enough condensed house comfort to compensate the new owner fully for his many disappointments. It was for the purpose of fitting a comfortable house to such a lot that this narrow house was designed. It is only the width of one room and a good hall in the front part, and dining room and bathroom in the center, with an extension for the kitchen. A kitchen with three sides to the weather fits a lot of this kind to perfection. You cannot get too much light and air into a kitchen. It is the most important room in a house—a room where a woman

spends a great part of her time, and you cannot make it too pleasant or convenient. Narrow city lots are especially during the fall and early winter months; but a kitchen built in this fashion comes about as near solving the problem as is possible to do.

There is an advantage in a full two-story house. The extra space over the upper rooms is worth a great deal to keep the house cool. The shape and height of this house gives it a good appearance from the street. It does not look like a narrow house. Probably the size and shape of the veranda have something to do with this; but it is a fact that a house built like this looks larger than it really is.

Such a house may be built under favorable conditions for about \$2,000 or \$2,200. A great deal depends on labor conditions and the distance that building materials have to be shipped. Some communities are discriminated against when it comes to house building because building supplies must be shipped long distances. Some communities have no stone or sand—two commodities which are very important in the building line. It is noticeable that such communities very often have to bring lumber from considerable distances. All these things affect the cost of the finished house.

The New Magic

A herd of reindeer tramples the Lapland snows; a polar bear leaps from a hummock of ice and dives into the arctic seas; a moth breaks its cocoon, dries its tender wings a moment in the sun and essays its first flight; a water beetle darts upon a snake, sinks its forceps below the head and clings to the throbbing, maddened reptile while a hundred fellows join the attack and strike until a mortal soot is reached; an otter sneaks upon a rock, slides its cruel paw into the stream and a quivering bass lies at his feet.

What wonderful stories are depicted in the moving picture films. The magic carpet is outdone. Day by day the creatures of the wild are captured in their haunts and led before us. Kings ride to be crowned; Moorish potters whirl their wheels. The mystic Nile flows in the glow of

Good Idea for Stenographers

A woman who owns and manages a public stenographic business in an eastern city has developed a new branch. She has provided herself and her assistants with telephone operators' headsets and receivers by means of which they take dictation by telephone directly on the typewriter from customers, perhaps miles away. This service is to meet the needs of lawyers, doctors and business men who have a few letters to write every day and yet not enough to warrant their employing a private stenographer. Letters are either signed, addressed and mailed direct from the office or forwarded to the customer for signature and mailing.

Motor Slaughter

Roughly speaking, motor vehicles are killing in the streets of London today about twice as many persons as were killed by the horse vehicles. That is a hard fact which is not to be disposed of by the motorist's claim that he has far more control over his carriage than a horse driver ever had. He has more control, we believe, but that only makes it plain that the control is not exercised.—Westminster Gazette.

Up Against It

"Dad," said the Avalon youth, "I want to go in for a career." "All right, son." "What would you advise?" "I dunno. Politics is crooked, and law, medicine and dentistry are overcrowded."

That doesn't leave me much of an opening," said the young man. "I have no talent for baseball."—Pittsburg Post.

He Begins to See

"When I first hit town," remarked Farmer Heck, "I user stand on a corner and wonder how all these city people managed to live."

"Well?"

"Well, seeing as they have got \$78 out of me in four days, it ain't such a mystery, after all."—Washington Herald.