

THE BEST BUILDINGS

MATERIALS USED IN SAN FRANCISCO STRUCTURES.

Construction Engineer Gives Opinions on Most Advisable Style of Construction for the Coast.

San Francisco.—The results of a fortnight's study of the effects of the earthquake and the conflagration on the better classes of buildings in San Francisco were given by James L. McLaughlin, an eastern construction engineer in the service of joint concerns which employ on the average 10,000 persons in building. He spoke as the representative of eastern construction companies.

"My first observation," he said, "is that the only material which both withstood perfectly the violent shakes of the earth and the fierce ravages of the flames were concrete and reinforced concrete, where they have been used here in foundations, floors and in columns for fireproofing. The Perry building, in which concrete flooring had been laid, was unaffected by the earthquake, so far as the main building was concerned. An example of its utility for fireproofing was afforded by the concrete-protected columns of the St. Francis hotel. It enclosed the steel columns, and by the protection thus afforded saved that structure from burning.

"As to Class A steel construction, the examples where the strength of the buildings was unimpaired was in those where gusset plates were placed under the girders and the girder beams. The best example of this was the Atlas building, on Mission street, near Second street. I cannot speak of the Claus Spreckels building, as I have not examined it.

"To show the advisability of the use of gusset plates, the steel cages standing. Where they have been employed with stiffeners under girders and girder beams, they have admirably served the purpose of sway-bracing. In my opinion Class A steel buildings constructed with gusset plates under girders and girder beams, and with stronger connection are capable of withstanding an earthquake shock such as that of the recent earthquake.

"Unquestionably the amended building ordinance will require stronger connections between beams and girder beams, and if the girders and girder beams have gusset plates wherever they are connected with the columns the best results will be attained. The most important factor in construction to withstand earthquake shocks is to have solid foundations. These may be on piles, but it is not my purpose to discuss the details of their employment at this time.

"For buildings of 12 stories or over there is the possibility of putting up steel cages with less extra expense than now, which would be proof against any earth vibrations. The total building of this kind would have reinforced concrete walls supported by a steel cage, and, in turn, strengthening the steel cage so as to be able to resist horizontal and upward movements.

"This building would have reinforced concrete floors and partitions throughout the structure. Such a building having also wire glass with metal sashes, a new kind of fire floor, which will probably result from the study of the effects of your great conflagration, will give a building which, with good foundations preferably resting on corrugated concrete piles, would be thoroughly fireproof and earthquake proof."

AFTERMATH OF THE FIRE.

Household Goods of Every Description Saved in San Francisco Burrows.

San Francisco.—The knowledge that had come to people of the possibility of saving household effects through burial during cyclones was put to good use during the big fire. The back yards of Russian Hill residents were freely used as burial grounds for all kinds of household goods, even costly trunks, silverware and bric-a-brac being planted in holes dug for this purpose.

The chief clerk of the International hotel, who lived in the house on the northeast corner of Vallejo and Leavenworth streets, saved the largest part of the furniture of two floors in this way.

Digging into a sloping bank at the rear of his residence, a hole was made ten feet square, and into this were placed trunks, bedding and household effects of every description. The building was completely swept away, not even a cinder being left of the wood-work, and yet when the goods were dug up the mattresses and similar inflammable belongings were free even from the smell of fire. A lot of earth over the buried goods proved ample protection for the most destructible stuff, and thousands of dollars' worth of family possessions were saved in this way.

Brussels Industrial Event. The International Association for Testing Materials, which holds its congress about every three years in industrial centers in various countries, will this year meet in the Academy of Science at Brussels from September 23 to 28. The king of Belgium accords to congress his patronage, while Prince Albert of Belgium will be one of the honorary presidents, as also will be the ministers of finance, railways, war and trade, and the mayor

NOT ALLOWED IN STABLES

Dogs No Longer Considered Good Companions for Fast Trotters.

Dogs are no longer the correct thing as stable companions of horses. Some years ago every trotter or pacer of prominence, and a good many of no distinction, had a faithful dog in its stall, and there was a sort of superstition among trainers that a dogless horse would not amount to much. Real champions always had dogs, says the Cleveland Plain Dealer.

"Way back in the days of Goldsmith Maid, that wonderful mare was accompanied on her travels by a small Scotch terrier, for which the old mare had some affection, although she was jealous of the beast, and when 'Old Charlie,' who took care of the mare and slept in the stall with her and the dog, made too much of the terrier, the mare would run the dog out of the place without ceremony. And when finally the dog disappeared for good the mare did not seem to miss it.

Cats take naturally to horses, and most horses like cats. The Godolphin Arabian, founder of the English thoroughbred family of today, that figure in Eugene Sue's works as the noblest animal of his kind, had for companion a cat that slept on the stallion's back and fed from his manger. But in the necessities of modern campaigning cats are too apt to be lost to make them available for horse companions, and few are seen, although now and then one turns up at a minor meeting.

At Cleveland a couple of summers ago, one trainer had four tame doves that could not be induced to leave his horses and that when the stable moved from one town to another were always ready to go into their cage for shipment.

Some trainers object to having dogs with the horses. Peter V. Johnston, who has brought out some of the best nags on the harness turf, says no dogs in his. He had one along some years ago and it made friends with the best horse in the string. One day the trotter accidentally stepped on the dog's toes while moving about the stall, whereat the cur snapped back and nearly severed a hind tendon for the trotter, ruining a \$10,000 racing proposition in an instant.

John Turner never had a dog along in all the years he campaigned trotters. Also he steered clear of black horses. Not any sable nags in Turner's barn after one year of terrifying experience. He had always known they were bad luck, but that season a patron bought Black Frank, a trotter that looked like the real thing. He went lame before he had been in the barn a day, and then misfortune followed one another until finally, Nettie, the best trotting race mare of that day, lay down and died. Turner is now with the runners, but his antipathy to black horses is still rampant.

CARRY VERY BIG CARGOES

That Is What the Ships That Sail the Pacific Are Said to Be Doing.

The steam schooner, a vessel whose build and habits are peculiar to the Pacific, often goes to sea "with her loadline over her hatch." Which means, says Ralph D. Paine in Outing, that after her hold has been crammed with cargo, a deckload of lumber is piled half way up the masts, so that her skipper puts out with the water washing green over his main deck, and an occasional ember frisking across his battened hatch.

Along the harbor front of Seattle runs the story of a passenger who loped down to the wharf in a hurry to get aboard a departing steam schooner. He balanced himself on the string-grip for an instant, then gave his grip-sack down the only opening in sight. He was about to dive after it when a lounge on the wharf shouted:

"Hi there! Where do you think you're jumpin' to? That's the smoke-stack you tossed your baggage down."

"Hell!" gasped the passenger. "I thought it was the hatch."

The yarn has a slight flavor of exaggeration, but it may serve to hint that the commerce of the Pacific has ways of its own. Until recently another distinctive feature of this shipping was that there seemed so very little of it for so much water.

On a recent voyage the Minnesota carried to the Orient 70 locomotives, more than a hundred railway cars, 10,000 kegs of wire nails, and \$500,000 worth of hardware, machinery, flour and other products of the mill, the mines, the farms and the factories.

In 1897 the total tonnage of American steam vessels engaged in the Pacific ocean was 23,425. In 1905 it had increased to 149,686, by which time more vessels in foreign trade were owned in Washington than in any other state of the union.

New ships are building to meet new demands, and yet with almost every voyage the liners leave behind them waiting cargoes for which they have no space, whose bulk is measured by hundreds of carloads. In the first half of last year ten ships were filled with freight left behind by steamers out of Seattle and Tacoma.

Struggled, All Right.

Plainness of speech is never to be despised in connection with work of reclamation. "Did you struggle against the consequences of temptation?" inquired a prison-visitor. "Yes'm," replied the object of her compassion. "Ah, if you had fought just a little harder you wouldn't be here to-day." "I done th' best I could, ma'am," said the prisoner, modestly. "It took six pull-means to come to the station"—Lionel Sturtevant.

NOW HAVE PENNIES

ARIZONA HAS SMALL CHANGE NOT LONG AGO UNKNOWN

Harbinger of the Tourist and What He Leaves When He Goes—Floods of the Copper.

Phoenix, Ariz.—This is fast becoming a penny town. That does not mean that it is getting to be a smaller or meaner place but in the matter of manners and customs a larger and more important place, however much the oldtimers may deplore the penny innovation. The farther east one travels the smaller the change becomes, and when the water is crossed the pennies are split. Still farther east the fractions are so small that a penny would look like a pretty sizable piece of money.

It has not been many years since a penny was a real curiosity in Arizona and it is still a rare article in some of the mountain towns. In those days a quarter was small change and nickels were only good to give to the children. They were even looked upon as pretty small for the contribution box. But those days have changed.

The change was brought about partly by the department stores, who thought to drive competition a little closer, but more by the winter tourist army that annually visits the southwest. It is not that they are less liberal than other people, but they use pennies at home all the time and have them in their pockets when they come to Phoenix. Though there are a few things advertised outside of the dry goods line in which the penny is a unit of value it is always good money at the post office and every tourist does business with the post office first and other places after.

Instinctively the pennies were offered at the post office and accepted without comment. That led to the expectation of pennies in change and, of course, they were provided. It did not take long for many of the home people to "get the habit" and now most anybody can flash a penny if he tries, though it is still the habit of the old settlers to tell the postmaster or the clerk to keep the change.

That the penny is the harbinger of the tourist, or vice versa, is proved by the fact that in the winter time the post office is flooded with pennies, for the tourists leave theirs there and the old settler, who gets them in the outside in trade or any other place offers them to the postmaster or gives them to somebody else who does when he would not think of throwing out pennies anywhere else in town.

In the summer time the pennies flow out again with the flight of the tourists and by midsummer the post office has to rustle for small change, sending to other towns for pennies.

SEEK FOSSILIZED ANIMALS.

Expedition Will Explore Western States for Remains of Extinct Monsters.

Chicago.—Fossil remains of elephants, camels, rhinoceros, and other tropical fauna which roamed thousands of years ago in Nebraska and South Dakota, near the shores of the Cretaceous ocean, when then covered a large portion of the Mississippi valley, will be sought by members of the expedition of the Field Columbian museum.

O. C. Farrington, head of the geology department, is desirous of adding to the museum's already large illustrative collection of fossils of the Cretaceous age. He has sent Prof. E. S. Riggs and J. S. Abbot, both of the Field museum, and T. E. Olooff, of Brooklyn, to Hermosa, S. D., where the party will begin researches immediately. Later in the summer the expedition will move to Kansas, where the work will be completed before fall.

Attention will be devoted to the search for fossils of sea serpents in the "bad lands" of South Dakota, which at one age was covered by water. Other animals to be sought include bison deer, dogs, raccoons, turtles and sea lizards.

Dr. Farrington declares the temperature in what now is Nebraska and South Dakota was tropical during the Cretaceous period. He states also there is a possibility of the climate again becoming tropical in these regions.

Married with Dog License.

A story of a wedding that failed is related by a London paper. Bride and bridegroom were just off in the honeymoon cab when another cab came down the street, with its horse performing unwonted prodigies of speed. From within the vehicle shouted and gesticulated the registrar's clerk. The bride grew pale, the bridegroom stiffened his shoulders. The clerk arrived. "Just caught you!" he grasped. "Hurry back to the office, will you?" Then he murmured in the bridegroom's ear, "My dear sir, I'm most exceedingly sorry, but there has been a slight mistake. My old governor went and married you with a dog license."

Zebra to Draw Street Cars.

Street cars in Zanzibar are to be drawn by domesticated zebras. Lord Howard de Walden, proprietor of a 40,000-acre zebra farm in Uganda, Africa, has received an order for 40 of the animals for that purpose. The zebra is stated to have some advantages over the mule for the work in question; he endures the climate better and is stronger, and is immune from the attacks of the tsetse fly.

CALIFORNIA EARTHQUAKES.

Number That Have Shaken the State During Ten Years, 1889, to 1898, Inclusive.

Among the reports of the United States geological survey published in the "minutes" are eight bulletins on the subject of earthquakes in California, which contain accounts of shocks that occurred during the ten years from 1889 to 1898, inclusive. Study of these bulletins shows that there was hardly a single month in all those ten years when seismic disturbances, more or less severe, were not felt along the Pacific coast.

The first of these bulletins (No. 48) was written by Prof. James Edward Keeler, astronomer in charge of earthquake observations at the Lick observatory. Previous to this Prof. E. S. Holden had published, through the California state printing office, a paper which contained a list of the earthquakes that had occurred in California, lower California, Oregon and Washington territory and which gave all the available data up to the end of the year 1888. The next bulletin (No. 55) published by the geological survey was prepared by Prof. Holden. It contained an account of the earthquakes in 1890 and 1891. The other bulletins covering the records for 1892, 1893, 1894, 1895, 1896, 1897, and finally 1898, were published as bulletins Nos. 112, 114, 129, 147, 155, and 161, respectively, and all were prepared by Prof. Charles D. Perrine, of the Lick observatory.

The largest and most complete instrument used for recording earthquakes on Mount Hamilton, as described in these bulletins, records the north and south, east and west, and vertical components of the earth's motion separately on a smoked glass plate, which is started by the preliminary tremors of the earthquake and rotates uniformly in about three minutes, the edge of the plate being graduated into seconds at the same time by a clock, which also serves to record the time of occurrence of the shock. This instrument has been called the Ewing seismograph. Another simpler form consists of a heavy "duplex" penulum adjusted to a long period of vibration, with a magnifying pointer or pen, which records on a smoked glass plate both horizontal components of the motion. The vertical component and the time are not recorded. The observatory possesses other seismographs of various patterns, but they are not constantly in use.

PUSHED BUTTON IN VAIN.

Hotel Guest Overlooked the Telephone and "Kicked" to the Clerk.

He walked heavily down the hall, a scowl on his face, his hat pulled down over his eyes and his teeth closed tightly in rage.

"Down!" he shouted to the elevator boy loud enough to disturb the other guests of the hotel. "Rotten service, rotten hotel, beats anything I ever went against in my life."

Then he boarded the elevator car and descended to the office floor. He was full of wrath and indignation when he almost ran to the hotel clerk, who stood behind the desk.

"What kind of a hotel is this?" he asked, nearly out of breath. "I've been in here before, but I never get such poor service in my life. The service in this joint is the limit."

The clerk smiled pleasantly, yet with a look of uneasiness on his face, and asked:

"Have some of our bell boys been unwell, sir?"

"Bell boys?" replied the guest at the top of his voice. "That's it. I have been trying to get one for an hour and haven't even seen one. I stood there in my room for half an hour pushing the button and ringing for a bell boy. What did I get? Nothing. Talk about service, I never— Now it was the clerk's turn. He said:

"I guess you're from the kerosene circuit, aren't you?" The guest did not understand.

"What do you mean?" he demanded. "Why, those buttons have been out of service for two years," said the clerk. "This is a modern hotel; we don't use the old antiquated system of so many rings for this and so many rings for that. Use the telephone when you want to communicate with the office."

The guest became meek and walked back to the elevator without making a response.

Eye-Openers.

An aged Scotch minister, about to marry for the fourth time, was explaining his reason to an elder. "You see, I am an old man now, and I can't expect to be here very long. When the end comes I'd like to have some one to close my eyes." The elder nodded and said: "Ah! well, minister, I have had two wives, and bath of them opened mine!"

Area of Peru.

In size Peru is fourth among South American republics, its area falling slightly below that of Bolivia. It covers 695,700 square miles, without including certain areas which are in dispute with Bolivia, Ecuador and Chili. It is thus nearly one-fourth the size of the United States, and nearly six times as large as the United Kingdom.

Cabbage-Head.

"I want to get a head of cabbage," said the man who had been sent to market. "Large or small head?" asked the fruiterer. "Oh, about 1 1/4," said the man, absent-mindedly.—Yonkers Statesman.

WEIGHT OF BRAIN

DOES NOT DETERMINE INTELLIGENCE OF MAN.

May Be Defective in Part and Yet the Person May Become Noted for Mental Brilliance.

Other factors besides brain weight are known to influence intelligence. It has long been known that the distinguished character of the human brain is the large number of connecting fibers by which its cells are coordinated. In no other species are they so numerous or complicated. The cells constitute but a very small part of the weight, says American Medicine. There is now considerable evidence that the same rule applies among individual men and that those of great intelligence have more connections, so that their cells can do more and better "team work."

Some investigations have shown the corpus callosum to have a large cross section in men who had shown great ability. It is also known that the brains of able men are likely to present more convolutions and deeper ones than the average, as if there were more brain cells as well as more connections. A few observations in the lower races point to the fact that their brains are essentially different in microscopic organization, partly accounting for less intelligence.

All these facts will fully explain why men of intelligence in the higher races may have brains not notably heavy, but they do not disprove the general statement that as a class such men do possess brains heavier than the average.

The mistake arises from the failure to recognize that noted men who have shown intellectual power are infrequently sharply limited to one or two directions, being very defective in other directions.

Blind Tom was an idiot, in fact an extreme case of what is called imbecility. At the other extreme was Gumbel, who was not much more than an orator whose cerebral speech centers were found to be highly developed. The rest of his brain was small and his general intellectual power and judgments were decidedly defective. Ability in one or two lines may make a man famous while he is really very defective and his brain proves to be small.

Heavy brains are not necessarily intellectual ones or elephant's world in a class of geniuses. The material might also be pathological and the possessor an imbecile.

It often happens that men of big brain and great ability suffer from early neglect and are found in lowly employments or may remain ignorant through life. These few facts do not prove that large brains are worthless and not indicative of mental power as a rule. We can not get away from the fact that man as an animal is supreme because of his large brain, that among races the brainiest are the highest and that in any case one race the most intelligent as a rule are those who have the most brains.

Men of small brains are not the leaders and no statistics of the brain weight of a few exceptional men prove that limited abilities can reverse the rule. Universities do not create brains but merely train what exist. The owners are better fitted for the battle of life. Many a man is sent to college who should be handling a plow and shovel, and he never amounts to much, even though he subsequently makes his living at some very limited specialty.

JEWELRY MATCHES.

Good Taste in Dress Calls for Harmony in Pins, Links and Buttons.

The harmony of color and blending of designs in the repertory of men's belongings is not only seen in scarf, shirt, handkerchief and hose, but also, says Men's Wear, in such minor articles as his jewelry, for the scarfpin, cuff links, studs and waistcoat buttons now match, and should be worn in colors that blend with the tone of those other dress accessories commonly known as "furnishings." It is considered good taste to have the scarf in close harmony with the ground of the shirt, and cravat pin, links, studs and vest buttons set with stones as near the same tone as it is possible to obtain. For example, green, in every variation of the shade imaginable, is the color of the season, and a jade stone outfit in jewelry is the newest of fads in spring's color elaboration. Other colored stones brought into vogue by the matching scheme now so prevalent are the coral, appropriate with the corn colored ground of the shirt, an old gold or canary yellow scarf, amethyst, with scarf in like tone as well as with purple, heliotrope and lavender; tourmaline, alexandrite, malachite, for the various reds and greens, and moonstone for evening dress.

Optimistic. "Jones is one of the most aggressive optimists I ever heard of."

"What's he been doing now?"

"He says he is going to get married and have a peaceful, quiet home."

—Houston Post.

Transforms Vegetables. M. Mollard, of Paris, not satisfied with the usual grafting adopted by horticulturists, has started to transform vegetables. It is said he has succeeded in turning a radish into a potato.

Varying Conditions. "What sort of a man is Jinks?"

"The impression you get of Jinks depends on the circumstances under which you meet him. If you're there to collect money, you won't like him, but if you're there to pay money he seems a lovely character."—Washington Star.

NO TWO HATS EVER ALIKE

Made by Machinery or by Hand There Is Sure to Be a Difference.

There are no two things alike in this world—no two atoms alike, no two blades of grass alike, no two peas alike, no two faces alike, wonderful—most wonderful of all—no two ladies' hats alike! Has this thought ever been impressed upon you while giving in an assemblage of women? Oh, the wisdom and forethought of nature, for were each woman to have a hat similar to her neighbor's what an infinite variety of additional woes and heartaches and tears the human race would have had to bear!

And, yet, Matthew Softleigh, born and bred in New York, says the Sun, knew enough of this. His tender brain could not conceive the fact that every thing in this world is infinite in its revolutions and ramifications, particularly ladies' hats, so Matthew backed his poor judgment with real money and made a wager with his friend Angus Cate, that he would soon find dim two hats that were alike.

Matthew and Angus selected a warm spring day and they walked up and down the great White Way, they promenade Fifth avenue, they visited the parks, they strolled to the east side, the west side and every other side, they visited the theaters, the concert halls, the churches, from day to day the quest continued until both were weary and footsore. They saw Gansboroughs, pictures, hats, sailors, hats of straw, hats of felt, hats with ribbons, hats with feathers, hats with aigrettes, but no two hats alike. They saw dreams of red and blue and green, as well as niches and niches and niches of Arabian Nights' phantasies. There was poetry and prose, music and flowers typified in every one, but no two alike! What the hurry they represented, what eagerness, brain activity, what thought, what toils, what delicacy in some, which if put into poem or a symphony would earn him or her a place in the Hall of Fame!

Matthew lost his bet, and it will be hard to find. There should be no two hats alike, there are no two hats alike, there never will be two hats alike. Nature, like woman, is fickle, she has a variety of moods, of expressions, of beauty, of color, of form and figure, and a woman what is the embodiment, the epitome of her every thought, her every wish, her every desire. Not one woman is like another, neither can her hat be. And when the time comes that two hats are found alike then will genius have reached its limit and the world will have lost all its beauty and all that makes life worth living.

IT HAPPENED IN JERSEY

There Was One Man Who Didn't Know About the San Francisco Earthquake.

Not all the world knew of the San Francisco earthquake. Within the range of vision on this from the top of the Flatiron building there was discovered the other day complete ignorance of the calamity, says the New York Sun.

The discovery came as a like to some literary folk who live the simple but busy life in a quiet corner of the New Jersey hills an hour's ride from New York. With the rural free delivery bringing the city paper on the day of issue they happened to turn to the morning after it occurred that they learned of the earthquake and fire.

The nearest habitation to the village is a farmhouse where dairy visits are made for the purchase of milk. During the visit of Wednesday, the day of the earthquake, none of the farmer's family, all guests of the usual hospitable type, mentioned San Francisco at all. On Thursday night, the visitor, while waiting for the milk pail to be filled, remarked, apropos of a threatening sky, that she hoped there might be rain in San Francisco, too.

"Why," asked the farmer, "don't they have rain out there?"

Amazed that anyone should not know about it, the visitor told in a rush of excited words of the blow that had fallen on the Pacific coast city. The farmer stopped milking to listen open mouthed.

"Durned if I heard a word about it," he drawled, when the visitor concluded. "You see, I hadn't been down to the village sense Monday, an' don't do much readin' here. The Brooklyn paper comes every week, but Samantha's eyes has been so bad lately guess she hadn't read the last copy."

The next evening the visitor brought, besides the milk pail, a bundle of New York papers.

"Now," she said to the farmer's wife, "you can read all about the earthquake in San Francisco."

"Land's sake!" cried Samantha, "was it San Francisco? Silas said it was Cincinnati."

Keeping from Close Range. "Why are you not at school?" sternly inquired the parent, meeting his son in the street.

The lad was not much embarrassed. "Fact is, dad," he responded, "there's something the matter with the teacher's temper, and I'm giving it absent treatment!"—Modern Society.