WHEN CHICAGO SITE WAS A CORAL REEF

MUSEUM PICTURE SHOWS

Mural Decoration Interesting in Field Institution; Mastodon Also Depicted; Other Scenes

The site of Chicago as it appeared about four hundred million (400,000, 000) years ago, when it was bounded by a coral reef in a tropical sea, is shown in a painting to be placed on exhibition at Field Museum of Natural History tomorrow, it was announced today.

The painting is one of three large new murats just added to the series on the walls of Ernest R. Graham Hall of Historical Geology. The second of the new paintings shows, as it appeared in life, a gigantic North American mastogion of the type which flourished especially in the Chicago region and throughout Illinois, Indiana and Michigan until they became extinct a few thousand years ago. The third new painting shows two dinosaurs of types which roamed North America about fifty-five million (55,000,000) years ago. One is a tyrannosaurus, and is seen meancing with its sharp pointed teeth the other dragon-like creature, a triceratons.

Part of Gift

The paintings are part of a gift of twenty-eight such pictures restoring scenes in the prehistoric world, which are being presented to the museum by Ernest R. Graham, Chicago architect, and member of the museum's board of trustees. Charles R. Knight of New York, recognized as one of the world's leading painters of paleontological subjects, is the artist. With the three just added, there are now ten of the pictures on view, seven having been previously completed and placed on exhibition in June. The remaining eighteen will be completed and hung within the next few years.

The artist's conceptions of the prehistoric world are based on studies of fossils and other research conducted by himself and by Dr. O. C. Farrington, curator of geology, Prof. Elmer S. Riggs, associate curator of paleontology and leader of the recent Capt. Marshall Field Paleontological Expedition to South America, and Henry W. Nichols, associate curator of geology. Other scientists throughout the country have also been consulted.

Prehistoric Times

"The painting of the Chicago coral reef depicts it as it is believed to have appeared shortly after a period of dry land which had been depressed by waters flowing in from the Arctic regions said Dr. Farrington today. "These Arctic waters in those days were warm, and formed an inland sea in which corals and other marine animals could grow in great profusion. At the beginning of this period corals grow on the edges of areas of unsubmerged land, forming reefs in the adjoining ocean like those found today in the South Pacific. Gradually the sea bottom sank lower and lower, the corals grew toward the top, and the lower ones died and were changed eventually into the limestone which today forms the foundation of the site of Chicago. As present-day corals do not live at a depth of more than 100 feet, the great thickness of limestone here indicates the extent of the subsidence of the sea bottom. A tropical temperature must have prevailed in the Chicago region at that time, for corals cannot live where the temperature goes below 68." Cousin of Elephant

The mastodon, which is the subject of the second painting, was a first cousin to the modern elephant, according to Prof. Riggs. Unlike the elephant, it had long thick hair. It was not as tall as the modern animal, had a longer body in proportion, long, moderately curved tusks, and was fitted for browsing on bushes and shrubs of the forested regions as well as feeding on grass.

In connection with the painting, Prof. Riggs said:

"The tyrannosaurus and triceratops represent two of the largest and most striking of the later dinosaurs. The triceratops was distinguished by having three large bony horn cores on its face-two above the eyes, and one over the nose. Its mouth was armed with a horny beak similar to that of turtles. A bony shield at the back of its head protected its neck and shoulders from the thrust of horns of animals of its own kind. It was preyed upon by various flesh-eating dinosaurs, the largest and most formidable of which was the tyrannosaurus, which reached a height of 24 feet when it stood upright on its hind legs. The tyrannosaurus had immense jaws armed with series of sharppointed teeth fitted for seizing other animals. Fossils of these creatures have been found in the region from Wyoming and South Dakota to the eastern slopes of the Rockies in Can-

Other Paintings

The seven paintings previously hung show the earth in the cooling period before the existence of any life; the beginnings of the minutest forms of life; the protoceratops, another dinosaur; the stegosaur; early forms of marine life on a seashore. 500,000,000 years ago; giant prehisetoric birds, and huge prehistoric kanGERMANY HAS LEAD IN INDUSTRIAL RESEARCH

Retains Prestige in This Line of Endeavor; Business Aided by Science

Research, promoted by modern business, is bringing its results to bear not only upon manufacture, but also upon the tariff and upon education, declares Silas Bent in an article "Research-The Business Builder" in the September Scribner's Magazine.

are generously subsidized, for the gov- trade barriers. Research will level erment believes in them now as firmly them, if at all, by making them useas before the war; and the same thing less for protective purposes. is true of Japan, which ranks fourth. "The industrial baboratory has thus denic of colds sets in.

LOUIS L. EMMERSON

For Governor

our own product.

Lesson in Tariffs

"This was a lesson in tariffs as well as a lesson in research. It must be clear that no tariff wall can be built high enough to keep out the goods of "Germany, which was far in the a country which excels sufficiently in vanguard before the World War, still the economies and superiorities which holds the lead in industrial research," come from successful and ingenious writes Mr. Bent. "The United States scientific investigation. International is a not very good second, and Eng- debts may do less than research in land ranks third. German laboratories the long run to level international

It is a race not merely for knowledge its political potentialities, aside from NO HOTEL ABLE TO but for markets. We had an example its commercial uses. More, it has edof this when certain of our industries | ucational implications. It may intook fright at the prospect of com- fluence, it may even deflect, the curpetiton in their own markets with ricula of our higher institutions of methanol, a German-manufactured learning. One of the problems now synthetic wood-alcohol, which could confronting great corporations is the be sold here much more cheaply than problem of research personnel. Where are they to find men competent to fill the ranks of their expanding laboratories? Unless Young America can te interested in the work for itself, there will be a shortage of the chief raw material, which is human brains. Fat pay-checks are not enough. The research worker must be animated by something other than a desire for ample living. He must burn with an inward fire which money can't kindle."

SELL YESTERDAYS

If Rooms Are Not Rented Today The Loss Cannot Be Gained, Claim

In the old days, a pretty good hotel room could be hand at the rate of one dollar a day. Today, a pretty good room and bath in a first-class New York hotel can be had for \$8 a day

That eight-dollar-a-day room costs \$5 a day to keep running. The same proportion of costs is maintained in hotels of differing price scales. The less you pay the less you get and that is a law of business and human nature. Roy S. Hubell, manager of Hotel Belmont, New York, in Nation's Every time the girls start wearing Business Magazine, says that a hotel something new from Paris an epi- of 1,000 rooms must take in \$5,000 every day to make a cent. The cost

is prorated among the lobby and the elevator force and the bellhops and the electric bulbs and what not. But it is there. Every penny of it can be accounted for.

A hotel room is the most perishable commodity on earth. If it is soldthis eight-dollar room we are talking about-the hotel rings up \$8. If it is not sold, the day is lost. No hotel can sell yesterdays, The hypothetical hotel of 1,000 rooms, which must take in \$5,000 each day before the costs are covered, would make a profit of \$5,000 if each room were sold each day. If the hotel is only half full the business of the day is done at a loss of \$1,000. The number of hulf-capacity days that every hotel has in the course of a year is surpris-

The man who called duty a pleasure was never faced by ustoms officials.



HERBERT HOOVER

THE Republican Party has a remarkable record of achievement. Nation and state have progressed and prospered under Republican rule.

Constructive Republican leadership in Illinois for more than 70 years—during which time there have been but two Democratic administrations - has won for this State an enviable position among the most progressive states of the Union.

The nominees of the party this year were selected at a primary in which more than 1,660,000 Republican voters participated. They were chosen because of their well-known honesty, ability and experience. Under their guidance Illinois will go forward with long strides during the coming four years.

They are pledged—

To hasten the construction of the bond issue system of roads and to undertake the working out of a plan for the surfacing of secondary roads, thus extending the benefits of paved highways to thousands of farms and small communities.

To apply business efficiency in highway construction and other public works.

To work out a sound, just and economic reform of the taxing system, in order to relieve homes, farms and other visible property of the unequal burden they now bear.

To cooperate in every way possible with agricultural interests for improvement of the condition of the farmer and to assist in securing national farm relief legislation.

To maintain a helpful attitude toward industry and to favor legislation for the protection of wage earners and the improvement of conditions under which they work. To assist the coal mining industry by demanding the re-

moval of the unfair differential on Illinois coal. To extend and improve the charitable institutions and maintain the highest standards for the care and treatment of

helpless wards of the state, free from spoils politics. To insist upon regulation and management of public utilities in the interest of the public which they serve.

To complete the construction of the Lakes-to-the-Gulf Waterway and to urge the building of a waterway connecting Chicago with the Atlantic ocean through the great lakes.

These and other pledges are all summed up in the one promise of efficient and economic state government.

Help Illinois by putting a cross in the Republican circle on Tuesday, November 6.

ILLINOIS REPUBLICAN STATE CENTRAL COMMITTEE



