

ENGINEERING

Aviation and Architecture

Architecture is another profession that is being influenced by the great development of aviation. The design prepared by Frank E. McMillan, superintendent of the Division of Postoffice Quarters and Engineering, for the proposed new Chicago Post-office, contemplates a great flat roof, 320 feet wide and 800 feet long.

The evolution of architectural styles like all natural evolution is a slow progress following the improved needs of growing intelligence. In America architecture is less than 300 years old. In this brief period of time it has progressed from the log cabin to our modern monumental buildings. It took 1,000 years to produce the Egyptian temple, 500 years to build the Greek temples and 300 years to erect imperial Rome. And never were the demands and requirements as many as today. In materials, in structure and in purpose, the task of the architect is increasingly gigantic. And now the architect's purpose is to be changed if not dominated by our getting into the air.

Not just for the landing spaces are modern cities concerned. An artistic view from the air is demanded. German architects are studying this matter with the intention of recommending improvements in the aspect from the bird's eye.

Therefore, we may expect roof gardens. Also we may not be surprised to see some of the billboards that line the automobile trails go up and lie down on top of the business houses.

Atlanta tells the flying world that it is "Atlanta" by spelling it out on top of one of the highest buildings.

Our future cities will present an entirely different skyline, experts say. Such Gothic buildings as the Woolworth skyscraper and those of Chicago University with points and spikes discouraging to aviators will probably disappear. Lieutenant Bernt Balchen, who piloted the giant "America" through hours of storm and fog over France looking for a place to come down, said in answer to those who were surprised that he could not see the Eiffel Tower: "No, I did not want to see it. I was mighty glad that I did not see it."

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Houseflies are a pest almost all over the world.

METEOROLOGY

Weather From Asia?

Study of weather conditions in interior Asia may help predict rainfall in California several months in advance. This is the opinion of E. A. Beals, of Alameda, who presents the results of his studies in a report to the American Meteorological Society.

"From a daily study of weather maps prepared under my supervision at Portland, San Francisco, and Honolulu for a quarter of a century," says Mr. Beals, "I have come to the conclusion that the most hopeful solution of the problem of long range forecasting in California lies in getting more detailed information about the winter high pressure center of action over Asia. Very little is known about this disturbance for the reason that the Chinese and Mongolians have not been interested in making weather observations along modern lines. The Russians have many meteorological stations in Siberia, but as our government does not recognize the Russian government, the recent data they have accumulated cannot be officially procured by the United States Weather Bureau, though it can be obtained by private individuals by corresponding directly with the Russian weather observers.

"To California, the track the storm takes after leaving the Aleutian Islands on its way to the United States, is vital. The full maturing of our crops cannot take place without sufficient moisture, and much money and labor could be saved, or adequate preparations made, if the amount to be expected could be told with reasonable accuracy in advance. If the track the storms take from the Aleutian Islands is northern, we get no rain; if the storm enters the United States south of the mouth

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ARCHÆOLOGY

Prehistoric Mirror Found

How the Aztecs and Maya Indians of prehistoric Mexico "got their faces on straight" is explained by Dr. Porfirio Aguirre of the department of archæology of the Mexican National Museum, who recently returned from the state of Michoacan with a seven-inch hand mirror which he found under many feet of earth.

The mirror is a round disk of pyrite. The surface which was once highly polished is now rough and broken.

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PALEOPATHOLOGY

30,000 Mummy Autopsies

Few if any of the ancient Egyptians suffered from syphilis, members of the hoi polloi had far better teeth than the ruling classes and Pharaoh Siptah of the nineteenth dynasty had a club foot. Such are some of the health facts about life in the valley of the Nile from three to six thousand years ago gleaned by recent research undertaken by Dr. Arnold Sach, of Heidelberg University.

Dr. Sach has just completed a detailed pathological examination of over 30,000 mummies in the hope of gaining some insight into the health conditions among the ancient Egyptians, a point of great interest to modern medicine because the Egyptians were known to have a comparatively highly developed art of healing. Malformations and bone fractures were the obvious things that come to the scientist's attention first and in many cases the mummies were found still wearing artfully contrived splints. Bladder stones were found in mummies dating back to periods before the earliest dynasties, indicating that this affliction was present from very remote times. Stones in the kidney did not appear until 3200 B. C.

Degenerating teeth are evidently one of the prices mankind has always had to pay for an advancing civilization. Bad teeth were rare during the early period of Egyptian history, Dr. Sach found, and in the poorer population almost entirely

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SOCIOLOGY

Prohibition Investigated

Prohibition and the Eighteenth Amendment, do they work? This is the problem planned to be extensively investigated by a committee of social science experts under the guidance of the Social Science Research Council at Chicago. Nearly a half million dollars, according to budget figures contained in the council's report just issued, will be spent on this survey. No report will be issued for some time since the study is now in its preliminary stages and is expected to require three years for completion.

Crime and justice, the effect of widespread introduction of machinery into industry, human migration, juvenile delinquency, labor markets, pioneer belts, and many other investigations are being conducted.

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Mummy Autopsies

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lacking. They were fairly frequent, however, in the royal mouths of kings and the teeth of 500 mummified remains of Egyptians of the highest class, excavated near Gizeh, showed nearly as much tartar formation and dental caries as those of modern Europeans. The sweetmeats of Cleopatra's banquets obviously had drawbacks:

Dr. Sach's researches constitute an argument for the negative in the controversy, over the presence of syphilis in the ancient world, for no changes indicative of this disease could be detected in any of the mummies examined. The only case of leprosy occurred in one dating from the late Christian era which strengthens the assumption that has been made that the leprosy of Biblical times is not the disease that we know. It is now thought that the leprosy of antiquity is a malady quite different from that which goes under the name at the present time and its exact nature can only be explained by further research in historical medicine.

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An insect's skeleton is on the outside of its body.

The glaciers in the Canadian Rocky Mountains are retreating.

The United States uses more than half the world's output of tin.

Mother cockles, or Venus shells, were made into strings of wampum by some of the Indian tribes.

Weather from Asia

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of the Columbia River, we do get rain; and the farther south the track the greater the amount.

"I am convinced that the route they will take depends largely on the behavior of the winter high pressure centers of action over Asia.

By the term "centers of action," says Mr. Beals, he refers to rather complicated weather phenomena. These are large areas on the earth's surface where the barometer remains relatively high or low for a long period of time. Eight such centers are known, of which four influence the Pacific weather. The principal one is the area which covers nearly all of Asia, except in the summer. Another is located over western North America, and for much of the time it reaches out over the Pacific. An important low pressure area extends over the Aleutian Islands and, like the other two, disappears in the summer. At that time, says Mr. Beals, a large high pressure area appears over more than half of the north Pacific Ocean.

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The U. S. Bureau of Standards is making experiments designed to improve enamels used in kitchen ware.

Five airplanes in Kansas recently helped to search for a bandit escaping in an automobile.

Electric refrigeration is being used in powder magazines of battleships to keep the powder cool.

An international medical code, to aid doctorless ships in getting medical advice by wireless, is being devised.

At the volcano observatory in Hawaii National Park 1,801 disturbances of the earth were registered in 1926.

A few corn borer worms in shredded cornstalks do not spoil the food for cattle, says the Department of Agriculture.

The same gas that bakes pies in the kitchen oven is now used to carve intricate patterns in steel plate and to cut steel billets 20 inches thick.

That physically handicapped people make efficient workers is indicated by the fact that 30 per cent of the 44,500 workers in the Ford plant are "sub-standard."

MEMORANDUM

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