



NO AIRPLANE RISKS

Mosaic map of the ruins of Armageddon, pieced together from balloon photographs of parts of the area. The rectangular enclosure in the upper right-hand corner is the site of Solomon's stables. Right, meteorological balloon, equipped with camera for short-range aerial photographs, in front of its hangar near Megiddo, the Biblical Armageddon.

PHOTOGRAPHY-AERONAUTICS

Unmanned Balloon Used To Make Aerial Maps

PHOTOGRAPHS of ruined and ancient cities are now taken from the air without the expense of running an airplane and the risk that goes with low flying. The apparatus used, moreover, "stays put" and gets the pictures from exactly the spot desired, and at an accurately controlled altitude.

The technique for the new low-altitude airplane photomapping has been worked out by archaeologists of the Oriental Institute of the University of Chicago. They hitch their camera to a small, unmanned balloon, such as is commonly used in Weather Bureau work, reel it out to the desired height, and release the camera shutter with an automatic device. By pointing the camera at different parts of an area they take partial photographs, which are then pieced together into a mosaic map.

In their recent work at the mound of Megiddo, the Armageddon of Bible fame, such a mosaic map shows accurately the skull-shaped outline of the town, with details of all streets and buildings, including the famous Stables of Solomon. Such maps are invaluable to archaeologists, for they frequently show traces of buried structures that cannot be seen from the ground.

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MEDICINE

Vaccines Used Against Germs Which Produce Rheumatism

GERMS as the cause of chronic rheumatism and vaccines to treat it were discussed by Dr. Reginald Burbank of New York City at the meeting of the American Medical Association in New Orleans.

In some early investigations into the cause of this widespread and distressing disease which doctors call arthritis, Dr. Burbank and his associates found that the blood of these patients carried protective substances against several strains of streptococcus germs. Since these could only have been formed under the influence of the germ, the investigators decided that the germs must be present in the blood. By a special technic they obtained some of the streptococci, but found them to be not the usual virulent type but another less active one that had developed the ability to live without arousing active resistance in the patient's body.

Rabbits after getting injections of cultures of these organisms developed the same chronic disease of the joints that had afflicted the human patients. Various tests showed that the changes

in the tissues of the rabbits, identical with those in rheumatic patients, were caused by the actual presence of germs carried to the joint by the blood from a focus of infection such as the teeth or tonsils.

The most effective means of treatment is a vaccine, Dr. Burbank said. Removing the teeth or tonsils, which are the most common foci of infection, may or may not be helpful in chronic rheumatism. If the germ causing the disease is already in the joint, as his investigations tend to show, removing the original source cannot give complete relief, Dr. Burbank pointed out.

In addition to the vaccine he recommended increasing the general resistance by diet, tonics and general constructive measures. He mentioned especially the beneficial effects of good posture, which improves circulation, decreases mechanical strain and increases general well-being. The intestinal tract is the most important secondary focus of infection, he said, so it is especially important to keep it in order.

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ORNITHOLOGY

Rescued Swallows Return To Home in Germany

GERMANY'S rescued swallows have come home.

Last fall the birds were trapped by the too-sudden advent of winter, before they had made the crucial flight over the Alps into Italy. Bewildered, threatened with exhaustion and starvation, they lingered in southern Bavaria, unable to wing their way over the mountains because of the incessant storms that raged there.

Fearing for a serious depletion of the species, bird lovers in Germany and Austria captured thousands of them as they huddled, wet and wretched, on their perches. They slipped identifying bands about their legs, and then shipped them in cages into Italy.

Lately the first wave of northward-migrating swallows passed over Bavaria. Some of them were trapped, examined and released. They wore the identifying bands.

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