



Reproducing carvings at Uxmal. Plaster casts, drawings and photographs are all used to obtain an accurate record of ancient Maya art.

a shell hole, and the monuments were thrown on all sides. This led Dr. Blom to infer that a treasure hunter excavated there at some time with dynamite. If so, the vandal seeker for gold did not realize that the carved stones all about him were a find of great interest though not the financial haul he sought.

The important monuments, when deciphered, have proved that Uxmal dates back to 500 A. D., which adds some five hundred years to its sup-

posed career. The finding of these date stones adds weight to the evidence that Yucatan was discovered or settled by Mayan immigrants many centuries earlier than had been supposed. It is known that the Mayas established an Old Empire in the south, in Guatemala and Honduras, and then abandoned it, no one knows why, to move northward, and build a New Empire in Yucatan. The recent discoveries of date stones which are read as being of the fourth to the sixth

centuries in Yucatan show that the northern migration took place earlier and perhaps more slowly than archaeologists had thought.

Dr. Blom's study of the Uxmal ruins included the making of 70 detailed architectural drawings of the section called the Nunnery Quadrangle. Plans for the Chicago World's Fair of 1933 call for the reproduction of this bit of ancient America to be set down in a five acre space with as much of the atmosphere of a Mayan city of a thousand years ago as can be captured and reproduced.

The Nunnery is the one building in Uxmal which can be labeled with certainty. Other buildings have romantic names, as the House of the Magician, the House of the Governor, but the Nunnery is historically recorded as such in a Spanish document. The writer describes the court with its cells on each side and explains that these cells housed the maidens who served religion as the Vestal Virgins of Rome did.

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Serum - Fed Calves Safe From Disease

Veterinary Medicine

THE control of bovine tuberculosis by immediate isolation of new-born calves from infected mothers is the latest victory of the Rockefeller Institute scientists, a victory equivalent to many million dollars of agricultural relief, it appears from a recent report of work done by Drs. Theobald Smith and Ralph R. Little, at the Institute's department of animal pathology at Princeton, N. J.

Calves born from tuberculous cows are at birth usually free from the disease. A large percentage of them soon acquire it, however, from contact with infected mothers. Attempts to prevent the spread of tuberculosis to the second generation in an infected herd by immediately separating the new-born calves from the diseased mothers have not been successful heretofore.

In spite of the most careful hygienic care, practically all the calves

thus isolated developed gastro-intestinal disease, joint disease, or blood-poisoning. Fully four-fifths of them died within the first few days.

Bacteriological examination of these calves has shown that death is usually not due to the common contagious diseases, but to invasion of the living tissues by the ordinary colon bacillus, dung bacillus or other presumably harmless environmental micro-organisms. Evidently the calf at birth is unprepared to resist invasion by ordinarily harmless bacteria, micro-organisms causing practically no disturbance in adult cows.

It has been found, however, that calves thus isolated will remain free from such infections if they are allowed one natural feeding before separation from the diseased mother. In this feeding they do not obtain the usual milk, but a specially secreted pre-milk, or colostrum. One colostrum feeding is usually sufficient to

immunize a new-born calf against the usual non-pathogenic environmental bacteria. Practically all calves thus fed may be successfully raised by artificial feeding.

Veterinarians have concluded from this that there is present in the pre-milk or colostrum some highly efficient natural antidote, specially designed to overcome the birth handicap. The nature of this colostrum antidote has been the subject of intensive research. Now the Rockefeller Institute scientists have found that the normal colostrum antidote is identical with, or at least similar to the normal biological antiseptic in adult cow's blood. Calves may be protected from the usual post-natal infections by one or more initial feedings with adult cow serum. They lost but one calf out of ten after such a preliminary serum meal.

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