

installed in the road. An analysis of these measurements serves to determine the proper thickness of the road slab in its different parts to support the traffic the road must carry."

A recent improvement described by Prof. Steinberg is a new kind of cement, which, when used in concrete, has the property of developing greater strength in 24 hours than is developed by the ordinary Portland cement in 28 days. This opens up remarkable possibilities in road construction.

"Whereas, by use of the ordinary cement a road must 'cure', or acquire strength, for 14 days after being laid, during which time it is not permitted to carry traffic, it may now be possible to build a portion of a concrete road on one day and open it to traffic the next. Studies are under way to determine more fully the physical properties and characteristics of this cement," he stated.

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#### CZECHOSLOVAKIA UNEARTHES RARE RELICS OF EARLY MAN

A zoo of all the prehistoric animals including cave bears, rhinoceroses, woolly mammoths, hyenas, wolves and lions, that flourished when glaciers were still in order in the weather program of Europe, are being mounted in the Zemske Museum at Brno, Czechoslovakia.

Czechoslovakia now has the largest collection of later paleolithic Aurignacian remains in the world, according to information just received by Dr. Ales Hrdlicka, physical anthropologist of the Smithsonian Institution. Paleolithic refers to that great period before history begins, when man merely chipped flint to make weapons and implements for use in his daily life, and knew no pottery, no agriculture, and as yet domesticated no animals. Moravia, the central part of Czechoslovakia contains more cultural remains of the later part of this age than probably any other section of Europe.

According also to Dr. Hrdlicka's correspondent, Dr. Karel Absolon, curator of the Zemske Museum, all the private collections of this region relating to early man have lately been bought by the State to be merged into one big collection so that practically all of the remains of Moravia are concentrated at Brno.

At Predmost, an important site for the remains of this age previously thought to be exhausted, a big ditch instigated by an industrial concern two years ago cut the exploration field in half and exposed still other large strata of cultural remains. Recent government appropriations have enabled anthropologists to continue the excavations in this and in other fields and Dr. Absolon's letter to Dr. Hrdlicka contains the first official account of the valuable prehistoric relics that have come to light.

"We have been digging at Predmost," says Dr. Absolon, "systematically since 1924 and discovering new treasures. The work of exploration may be carried on here for many years. We have found very beautiful new 'laurel leaves', (flint points) a large quantity of new stone implements, a sculpture of the human face and tons of bones."

"The event of the greatest importance was the opening of a new exploration field in southern Moravia, at Vistonice, which place is now as important as Predmost and may become more celebrated if we find there fossilized human skeletons.

"One can hardly imagine a more favorable location for the Aurignac man, whether he migrated from East to West or from West to East, probably from the East. I am sure that we shall solve this question after we have explored all the stations in Moravia and Galicia, as far as the Ukraine. We do not know the actual extent of the Vistonice field, but even that was discovered simply by the finding of flint implements on the surface of the fields, and we have records of many such fields where flint implements are to be found on the surface, at points distant many kilometers from one another. The stratum of cultural remains is here as much as 60 centimeters (about two feet) deep and literally overcrowded with flint implements and other rare objects. Here there are real diluvial "kjoekermoddings" such as we have not known in the diluvium heretofore, large burnt spaces filled with mammoth bones, some split, with the joints cut off, the marrow taken out, but a great many entire. Of them all the most precious are statuettes and among them a splendid new 'diluvial Venus'. For a long time we were unable to tell of what material these statuettes were made; they were rather heavy and under microscopic inspection looked as if made of compressed and burnt clay. It was only by chemical tests recently undertaken that we ascertained that they were simply carved out of bone which has been mineralized in a peculiar way, fossilized, in the true sense of the term."

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#### CRAMMING NO HELP TO COLLEGE STUDENTS

Cramming the night before examinations may pack college students' minds with erudition, but the vigil will make them so sleepy that they will not be able to make efficient use of their hastily acquired learning when the test comes. An experiment on five Stanford students by Herbert R. Laslett, a graduate student in the department of psychology, indicates that lack of sleep has a deteriorating effect on the "higher mental powers".

The experiment in question lasted 72 hours. For three nights the five boys remained awake and performed various tests in the department of psychology laboratories. At intervals they were given intelligence tests.

Mr. Laslett expects to determine by further experiments whether there is any basis for the theory that sleep may be a "habit", and may not be necessary to physical well being. Napoleon is pointed out as an example of a man who had very little sleep and proponents of the "sleep habit" theory declare that man may be able ultimately to break the habit and do with little or nonsleep.

The Stanford tests, Mr. Laslett said, show that loss of three nights' sleep is not physically harmful. All his subjects were given physical examinations by an attending physician at intervals.

In commenting on the tests, he said:

"While it is quite possible that the story of Napoleon living twenty years with an average of less than four hours' sleep a night has a real foundation, this