

human being still older. For this reason the scientists are turning to old deposits of the earth, called the Tertiary, confident that there will be found the solution of the true riddle of human evolution.

While Sinanthropus has many characteristics of modern man, Dr. Weidenreich feels that there will be found in

Asia a link between him and modern men, a kind of ancient man somewhat like the Neanderthalers of Europe. He is convinced that Sinanthropus is a direct ancestor of modern man, at least the Asiatic variety, and that somewhere among the direct ancestors of Sinanthropus was a creature whose future descendants included both men and apes.

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CHEMISTRY

Wool Made Unshrinkable By New Revolutionary Invention

Simple Dipping in Chemical Does the Trick Without Damaging Durability, Softness or Fluffiness

A NEW, revolutionary method which solves the old problem of making wool unshrinkable, without damaging it in any way, has just been invented by A. J. Hall, English textile chemist.

The important feature of Mr. Hall's process is that it permits shrinking wool without adversely affecting its durability, its original softness and fluffiness, and its color—something which heretofore has proved to be impossible. These defects have been associated with unshrinkable processes for over forty years, since they were first practiced. In spite of much research, they have remained unsolved.

Extremely simple, Mr. Hall's method merely consists of dipping the wool in a solution containing the chemical sulfuryl chloride. The chemical is dissolved in "white spirit"—a solvent which is used a great deal in dry cleaning. About 1½ to 2 per cent. solution is used and the

treatment lasts about an hour.

Already Mr. Hall's invention has aroused considerable interest among wool manufacturers and finishers. Many important firms have taken out licenses under the patents which are being applied for in most of the countries throughout the world.

Previously it was always thought that to make wool unshrinkable, treatment with chlorine in some active form—like sodium hypochloride or chlorine gas, the same gas used by Germans in the first gas attacks in the early stages of the war—was necessary. But always the wool came out with a harsh feel. If the wool was dyed, the treatment bleached the dyes. Then if such unshrinkable wool was made into clothes, they did not last as long as garments made out of untreated wool.

Tests on wool treated by Mr. Hall's

processes show that all these defects are overcome. The wool has the original soft and fluffy feel. It is just about as durable as the untreated wool. Its color and the dyes on it are not changed in the least. The wool does not seem to be chemically altered at all, the microscope reveals.

Other features of the new method are: wool can be treated as it comes from the sheep's back or in the form of socks and other clothing. The wool does not have to be washed first, or treated in any special way. The treating solution can be used over and over again and Mr. Hall has used the same solution for over a year. It is only necessary to add sulfuryl chloride as it is used up, and purify the solution once in a while.

Wool mixed with rayon and cotton can be treated without harming these fibers, provided they are not too damp.

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ENGINEERING

New Mountain Highway Will Have Nine Tunnels

RELIEF for the American motorist on one of the toughest year-round trips in the country—between Harrisburg and Pittsburgh directly across the Allegheny Mountains—is now under way.

Imagine a super highway through this rugged country for 165 miles of which 125 miles will be in a straight line, averaging only one curve per mile and with no grade greater than three per cent.

CLIMB DODGER

This picture map shows how the new highway will dive under mountains to smooth the way for motorists

