

TECHNOLOGY

Good News For Tall People

The average American man is growing taller each generation. Gradual as it is, this change is being acted upon by many bed manufacturers and X-ray equipment makers.

By ALLEN LONG

► THE AVERAGE American man is growing taller with each generation. Army figures show that he grew six-tenths of an inch between World War I and World War II, adding nine pounds to his frame.

Although his stature has been slowly increasing, this change has not gone unnoticed.

Bed manufacturers recently decided that it was high time for some new standards. Army figures had tipped them off to the fact that the number of men who are five feet ten inches and over has increased 45% since 1918. The number over six feet has increased 70%.

This means that more and more uncomfortable men, and women, are being jackknifed into beds too small for their big-boned bodies. More sheets are pulling out from under mattresses, more persons are lying diagonally across their beds, and more feet are sticking out into cold winter nights.

Bed makers had been uneasily aware that the current standard bed, which is just right for a five-foot-ten-inch man, was rapidly becoming an anachronism. Odd-sized beds, mattresses, springs, sheets and blankets began appearing. They were snapped up by an uncomfortable public.

Meanwhile the National Association of Bedding Manufacturers foresaw the day when there would be a riot of bed sizes, shapes and descriptions on the market. They envisioned the time when a harassed housewife would be seeking out an odd-sized mattress to fit a bed made by some then defunct manufacturer.

Standards for "king-sized" beds were needed and, in consultation with the Commodities Standards Division of the U. S. Department of Commerce, the bedding manufacturers drew up new dimensions.

New king-sized beds will measure 82 and a half inches from end to end. Figuring in the usual six-inch margin, the extra-long mattress will comfortably sleep a man six feet four and one-half inches tall. It could completely accommodate a man six feet ten and one-half inches tall, but with no room to spare at the head or foot.

Already most of the nation's bed makers have adopted the standard for king-sized beds. Some now have them in production. The National Association predicts that most of its membership will be turning out extra-long Hollywood-type beds in time for Christmas.

Dr. T. Dale Stewart, physical anthropologist at the Smithsonian Institution in Wash-

ington, reports that people are becoming more and more aware of man's size—and the limitations his height imposes.

During the war, he said, aero-medics found that you could not build an airplane, jam it full of instruments, shoehorn a pilot into the cockpit and expect him to perform efficiently.

"The armed services called in a group of anthropologists to explore the brand-new field of human engineering," he said.

"Today many new airplane designs are routinely checked from the human engineering point of view. Scientists study a full-scale mockup of the new plane, and they fit the pilot into it."

If the pilot's knees knock against the throttle or if the pilot cannot freely move his head, something must be changed.

As planes are built to cruise longer distances non-stop, attention must now be paid to the design of pilots' seats so that long hours of sitting will not cause fatigue or "pins and needles" from impeded circulation.

There is a growing emphasis today on this new science—on fitting a machine to man's physical and mental limitations. Adjustable seats in automobiles and simplified controls on factory equipment are cases in point.

One X-ray manufacturer has marketed a new machine with a seven-foot-long table especially designed to accommodate tall patients.

Even your school-aged children may be made more comfortable because this science is growing in prominence.

W. Edgar Martin, a specialist in school furniture and equipment, has tabulated basic body measurements of boys and girls from four to 17 years old for the U. S. Department of Health, Education and Welfare. The booklet was prepared to provide school officials, architects and design engineers with meaty facts and figures.

However, the figures and measurements will probably have to be rechecked in 40 or 50 years. They will go out of date because man's body is itself changing.

Why is man growing taller? Will he reach an eventual "ceiling?" If not, will he fall prey to his size, like dinosaurs, and become extinct?

These are some of the questions that



A TALL CLIENTELE—Even clothing stores are now set up especially to serve the taller-than-average customer. Shown here are two employees of Tall Apparel Shops, Inc., Washington, comparing one of their "queen-sized" suits with a standard suit held by the woman in the middle. Note the difference in sleeve and skirt lengths.

anthropologists are asking themselves. There are many speculative answers to them, but it is thought that diet and mate selection favor an increase of stature of the American. Some anthropologists even think that man may reach a height of about eight feet in thousands of years.

No one really knows why man is growing taller. Most persons believe a number of things are working together to increase his stature.

One angle of the theory is that a well-fed baby stands a good chance of reaching a real physical maturity. A child who eats but does not get the proper nutrients is likely to be stunted.

Anthropologists point to small-sized immigrants who entered this country in the last century. Some of them came from a poor economic and nutritional status in the old country. Their new environment in America did not change their adult physiques, but their children "sprung right up," as one anthropologist has said. Even the children's heads were shaped differently in comparison to their parents'.

Another popular finding that helps explain the ever-increasing average height is mate selection. Tall persons seem to prefer tall mates. Offspring of these unions thus would tend to inherit tall statures.

There is a general feeling that giantism is a physical specialization that leads to extinction. Whereas the bulky dinosaur perished, however, the mammoth whale has survived. This may be because the whale's large body is supported by water.

It is difficult for anthropologists to say how man's height has been changing through the ages. The body armor that soldiers wore centuries ago might yield a few clues, but even these tangible fragments of the past do not give definite conclusions about their wearers' statures.

Hundreds or thousands of such suits of armor would be needed for anthropologists to draw a valid conclusion as to the average height of the 15th Century soldier, and only a relative few have been found.

It will be many hundreds of years before man's height "ceiling" will be attained—if it is attained. Meanwhile man has a more pressing problem. He must figure out how to live until then without destroying himself with his H-bombs.

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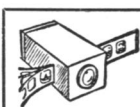
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