

Medical Sciences Notes

MEDICAL SAFETY

FDA To Widen Safety Laws

An Administration-proposed bill titled Medical Device Safety Act of 1967 is taking shape and will be introduced shortly, officials of Food and Drug Administration say.

With revolutionary advances in the development of medical devices taking place since the original enactment of legislation nearly 30 years ago, the very materials used in the manufacture of new gadgets have to be thoroughly tested for safety.

The Act would require in the first place pre-marketing clearance of devices not generally recognized as safe and reliable by qualified experts, such as organ substitutes and certain contact lenses. In the second place, it would require establishment of standards to assure the safety and performance of such devices as bone pins, catheters, X-ray equipment and diathermy machines. Such standards already apply to drugs.

CORRECTION

FDA Ruling on Doctor Clarified

The Food and Drug Administration has clarified a ruling made last November on the suitability of Dr.

Robert A. Wilson, author of "Feminine Forever," to conduct clinical tests with drugs.

Searle & Co., manufacturer of Enovid, an oral contraceptive containing norethynodrel, was notified by FDA Commissioner Dr. James L. Goddard that Dr. Wilson's test data on that drug would no longer be acceptable because Dr. Wilson "has publicized the use of Enovid in lay publications, stating that it is effective in preventing the symptoms of menopause." This claim goes far beyond FDA-approved uses for the drug.

Dr. Wilson was judged "unsuitable" to conduct further tests only with that particular drug. It was erroneously reported that he was declared unsuitable to test any drug (SN: 11/12/66).

MEDICINE

'Hands-Off' Chair Cares for Patients

An automatic "Medichair" which can monitor physiological changes in patients without the use of taped wires or body harnesses is being developed for studies of astronauts by Philco Corp., Palo Alto, Calif.

The Medichair system can also be adapted to operating rooms, hospital beds, dental chairs and even home monitoring, says Philco's bioastronautics medical division. A modified Medichair is also being used in a Ford Motor Co. driver safety research program.

Social Science Notes

URBAN CRISIS

Apply Science to Cities

"Black boxes" is the name of the game that could, if it is played right, remake cities in a smoother and happier image.

This is the message of a report on "Science and the Cities" released this week by the Department of Housing and Urban Development. The report and the 1966 summer study project on which it is based borrows freely from space age terminology and technology.

Space engineers describe complex machinery as a combination of black boxes, or systems. If each box functions properly in relation to every other box, the machine works smoothly, as in the space program. But the city's black boxes—transportation, garbage disposal, housing and so forth, need major overhauls.

Scientists and specialists who met at Woods Hole, Mass., last summer marked the beginning of a new scientific effort to reform cities using systems analysis. On the basis of this report HUD is asking \$20 million in government funds for next year to promote such an analysis, compared to this year's \$750,000.

PSYCHOLOGY

Fear Conquered

Between his first leap and the time he becomes an accomplished skydiver, the parachutist conquers great physical fear. How he does this is detailed in a Massachusetts study of 20 parachutists.

Accomplished jumpers show an entirely different pattern of anxiety than do novices. It is an adaptive

pattern, with fear peaking long before the jump, reported psychologists Walter D. Fenz, now at the University of Waterloo in Canada, and Seymour Epstein of the University of Massachusetts in Amherst. They reported in the February issue of *Psychosomatic Medicine* that while novices are crippled with fear and a wildly-rising heart and respiration rate right up to the moment of jumping, accomplished divers actually show a decrease on all accounts. When they jump, their levels of anxiety and physiological excitement are completely normal.

The psychologists proposed that early fear prompts blocking mechanisms learned through experience.

On the morning of the flight, the accomplished diver is anxious; his body responds with arousal. Then, in succession, fear disappears and respiration, heart rate and skin conductance return to normal.

This interplay between fear, arousal and inhibition produces a "highly adaptive mechanism for the mastery of threat," said the psychologists.

PSYCHOLOGY

Human Inventiveness

Human inventiveness is not an easy thing to study, but Dr. Sam Glucksberg, Princeton University psychologist, made a few observations last week based on his three-year investigation into the mental processes behind novel behavior.

He found that giving a wrench a nonsense label, like "jod," greatly increased its novel uses among a group of students. The familiar word "wrench" inhibited creativity, said Dr. Glucksberg. To a certain extent, he said, names determine—and limit—what an object is.