

MEDICINE

Summer Eye Protection

► **SOME TIMELY** tips for guarding your eyes against various summer time hazards come from the National Society for the Prevention of Blindness.

If you go to the seashore, you need not worry about sea water harming your eyes, providing it is clean, but too much time in the water may result in eye irritation. Keeping your eyes open too much while swimming under water makes it easier for infections or irritations to develop, especially if there is any chance that the water is contaminated.

Being exposed to sunlight reduces, for a time, your ability to see well at night or under artificial illumination. Many an automobile accident this summer may be caused by reckless sunbathing without dark glasses rather than by reckless driving.

Excessive sunlight lowers the sensitivity of your eyes to dim light, a dangerous fact for those who must drive after dark.

The safest way to remove sand or cinders from the eyes is to give nature a chance to do the job. Stimulate a flow of tears by gently pulling the upper lid over the lower lid. If this doesn't work, do not risk eye infection. See a physician as soon as possible.

Sunglasses do not keep out all the burning rays of the sun that can actually cause

permanent damage to the eyes. Never look directly into the sun, no matter how dark your sunglasses are.

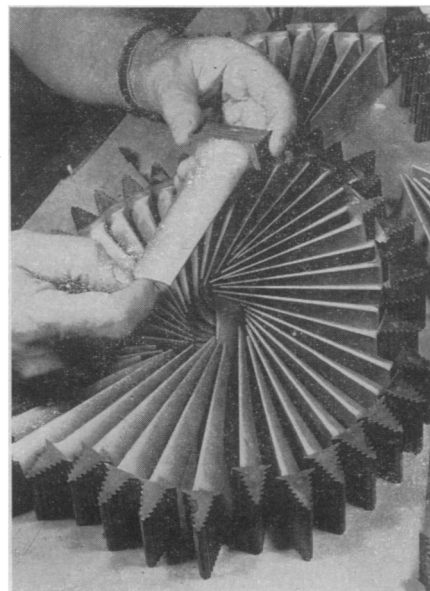
Make sure that baby is not over-exposed to the sun, and protect him from wind-blown sand or sand tossed by older children. See that young children's toys are free from grime. Keep them away from sharp-pointed sticks or digging tools, splintered shells or rocks. Teach older children that reckless horseplay is dangerous.

Motorists returning from beaches are more accident-prone. This is largely because a long day in the sun cuts down your sensitivity to dim light.

Tests have shown that if vision has been weakened by too much sun, motorists driving in the evening cannot react and stop their cars as quickly as they can under normal conditions, obviously increasing the chance for accidents.

Tinted glasses are not good for night driving. In fact they are dangerous. They cut down headlight glare, but they also cut down essential light. Remember you need all the light you can get while driving at night. Scientific tests have shown that motorists who wear tinted glasses while driving at night greatly increase their chance of accidents.

Science News Letter, July 31, 1954



GRAIN STRUCTURE REVEALED

—During production Waspaloy turbine blades are given an acid bath to bring out the grain size for inspection. (See SNL, July 24, p. 62.)

GENERAL SCIENCE

Better Jet Fuels From Studies of Atmosphere

► **BETTER JET** fuels can result from study of chemical reactions taking place high in our atmosphere, Dr. Joseph Kaplan, professor of physics at the University of California in Los Angeles, has revealed.

He told the House Committee on Appropriations at hearings in Washington that "air glow," which had been found to be "intimately connected" with the chemistry of jet fuels, resulted from these chemical reactions.

Information on the various combinations of oxygen and nitrogen needed by scientists in the laboratory, he said, "can be gotten from experiments made for us by nature" several miles overhead.

Dr. Kaplan revealed the close connection between jet fuels and upper atmosphere chemistry while justifying appropriations for the International Geophysical Year. The National Science Foundation has requested a supplemental appropriation of \$2,500,000 for fiscal year 1955 to finance the United States program for the International Geophysical Year.

The International Geophysical Year, scheduled for 1957-1958, will involve a world-wide scientific examination of the earth, sea and air by at least 30 nations. Results of this research are expected to benefit "national defense, agriculture, commerce and industry," Dr. Alan T. Waterman, director of the National Science Foundation, told the House Committee on Appropriations.

Science News Letter, July 31, 1954

GERONTOLOGY

Restore Disabled Old

► **DISABLED OLD** people can be rescued from "imprisonment" in bed or wheelchair and some even returned to economic independence, two Pennsylvania physicians have reported.

The doctors are Murray B. Ferderber of the University of Pittsburgh School of Medicine and Gerard P. Hammill, director of the Allegheny County Institution district hospitals at Woodville and Mayview, Pa.

The method they tried was simple and effective. They started at the county hospital with 12 of the worst patients from the 50-bed female infirmary. These were moved to a large, light area.

The women had previously been out of bed only for repairs and replacements. Most had forward-flexed heads, from "sagging springs and severe obesity." All but one were "stroke" cases, with "almost every conceivable deformity, resulting from disuse and negligence."

The doctors said it was their "belief that this same picture could be duplicated in many of our 'poor houses,' public or private, throughout the country."

Patients were encouraged to sit up, a few minutes more each day, until "their apathetic hoplessness, so obvious, changed to an occasional smile, and a few words were finally spoken, until they resembled more of

the human than the vegetating animal."

Soon bedpan training caused a drop from 11 pieces of extra bed linen a day to two. Patients advanced from one-handed hair arranging and radio listening, to use of bars and pulleys, then standing or walking.

Finally, patients who had been "incarcerated" in bed "shuffled or limped to the dining room, a place they had never seen since entering the institution," Drs. Ferderber and Hammill reported.

"We realize, of course, that there are limitations to the results that might be achieved, that total rehabilitation is not always possible, but on the other hand some degree of restoration can be achieved through returning many of the patients to some physical independence, either at home or within the institution.

"The care of our older citizens is reflected in the results that certainly have justified the efforts expended," they said. Twenty-three per cent were discharged, 45% became ambulatory at the institution, 12% were improved and 20% showed no tangible improvement.

Science News Letter, July 31, 1954

The people of India constitute one-sixth of the world's population; 85% of them live in small rural villages.