



Trout

➤ WHIRRRRRRRRR! THE reel sings out, the rod's tip bends, a silver flash, another, another—the battle is on, Trout versus Angler. And may the better wit and the greater alertness, by no means definitely the Angler's, win the day.

For the time has come when the city dweller who is not too far from where swift, cold water flows will take a day on his week-end to slip out and try his luck with a rod in his favorite stream. And in a multitude of other places, the sons of Izaak Walton are piously conning their brevieries—to wit, their fly-hooks—and counting the days until they get their summer vacations.

Of all the finny gods in their calendar,

they bow lowest, and most frequently, before the image of the trout. The bass may run him close, and the vicious pike or muskellunge claim devotion in moments of craving for a big fight with heavy weapons. But, in the end, the True Believer returns to the trout.

Slim and beautiful whether in the water or safely landed, swift with a speed that would seem to belong properly only to the birds of the air, water-wise and hook-wise with an intelligence that seems a shade supernatural in a mere fish, he is the prince and primate of all things that live in fresh water.

The various species of trout, home-biding fellows for all their adventurous disposition, have wandering brothers in the salmon. The salmon most sought after as game fish, indeed, are placed by naturalists in the same genus with trout, who even give them their own scientific name, "Salmo."

The big salmon of the commercial fisheries are also rated as close relatives, but ranked in a separate genus.

Even though it does dwell permanently in fresh water, the trout can on occasion do some vigorous traveling on his own account. The Yellowstone trout used to be a good deal of a puzzle, because it was found in the headwaters of the Snake River which drains to the Pacific, and also in Yellowstone Lake, on the Atlantic side of the divide. But the divide between the lake and upper rills of the river is in places a flat, wet meadow, and here in rainy seasons trout have actually been seen working their way over "the top of the world" through shallow pools.

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## METALLURGY

## New Aluminum Alloy Stands Intense Heat

➤ METALLURGISTS HAVE pushed back the thermal barrier for aluminum with a new high temperature alloy that promises to improve the performance of supersonic jets.

The alloy, called X2219, offers excellent properties for aircraft at temperatures up to 600 degrees Fahrenheit, the Aluminum Company of America disclosed. Along with other pending alloy developments, the new metal is expected to raise the temperature limits on aluminum.

Continued use of ordinary aluminum in some parts of supersonic jets has been threatened by undesirable properties of previously available alloys at the high temperatures generated in such speedy flight.

X2219's properties are expected to make it valuable for use in and near aircraft and automobile engines.

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## PSYCHIATRY

## Mental Patients Living Longer, Study Shows

➤ MENTAL HOSPITAL patients are living longer nowadays, just as does the population as a whole. The increase in longevity in both cases is due to control over infectious and other diseases, statisticians of the Metropolitan Life Insurance Company stated.

Those who recover from their mental sickness also have a favorable outlook for a long life. Applicants for life insurance who had recovered from a psychoneurosis of relatively mild degree had a survivorship rate of 99.1% five years after they were insured and of 97.3% ten years after they were insured. These figures are from a study covering the experience of a large number of life insurance companies during the period 1935-1950. The insured were mostly men diagnosed as having psychoneurosis in connection with military service.

These survival rates were only slightly less than those for standard risks as a whole.

Even for applicants with a history of mental illness of severe degree, who naturally were selected with great care, survival after recovery compared not too unfavorably with standard risks.

At the end of 15 years the proportion surviving among those with severe psychoneurosis or psychosis was 88.8% compared with 93.1% among standard risks as a whole. The results indicated that the excess mortality among patients with a history of mental disorders is no greater than that resulting from many types of physical impairments.

Suicide accounted for a large part of the excess mortality among them. For most other causes of death, their mortality was not significantly different from that among standard risks.

Science News Letter, May 28, 1955

## MEDICINE

## Hypnotism for Burns

➤ HYPNOTISM CAN be used to speed recovery of severely burned patients, a five-man team of psychiatrists and surgeons at the University of Texas Southwestern Medical School, Dallas, reported to the *Journal of the American Medical Association* (May 14).

Patients who were slowly starving because they had lost all appetite ate voraciously, consuming up to 8,250 calories a day, after hypnotic suggestion that they would be hungry and crave food. They even selected the particular foods that doctors consider most important for aiding recovery from burns, though in some cases they had disliked the foods even before they were burned.

Instead of begging for drugs to relieve pain, they were able to stand skin grafting operations without anesthetics while under hypnosis.

They felt better, exercised fingers and hands to help prevent crippling contractures, and began getting out of bed and doing things for themselves.

As a result, apparently of the increased food consumption, skin grafts took and

the burns healed better.

One patient, bedridden for 18 months and going downhill, was discharged from the hospital walking and with nearly all his wounds healed 12 weeks after hypnosis was started.

While some patients are not amenable to hypnosis, there would be few such, the doctors think, among burned patients. They are so miserable and in such pain that they are ready to cooperate in the experiment that offers relief from their suffering and may speed their recovery.

The time involved in the hypnotic treatment is not great and resident and attending surgeons and resident anesthesiologists can quickly learn the techniques so as to reinforce the hypnosis daily.

The good results with this method of helping burned patients are reported by Drs. Harold B. Crasilneck, Jerry A. Stirman, Ben J. Wilson, Erasmus J. McCranie and Morris J. Fogelman.

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About three percent of all sea water is ordinary salt, sodium chloride.