



**PREDICTED**—Shown above is Russian artist's conception of a Soviet atomic-powered train of the future, taken from the Communist magazine "Technical Youth." Soviet Engineer Yuri Moralevich says that in "20 or 30 years" gigantic coaches and freight cars will be pulled along 15-foot wide tracks by atomic-powered locomotives. In drawing, passengers board the train on a gangplank (lower right) like those used for ocean liners. Lower deck compartments are fitted as de luxe staterooms. The upper deck has lounges and a movie theater. The engineer's diagram of the locomotive, at left, shows nine electrical motors. A present-day freight train and an "atomic freight" of the future are shown at top of the artist's illustration.

—International News Service Photo.

show they push almost as much freight over their shorter track-gage as the United States does.

#### ENGINEER'S FORECAST.

Taking a look twenty or thirty years into the future, Soviet engineer Yuri Moralevich predicts that gigantic coaches and freight cars pulled by atomic-powered locomotives will break the bottlenecks.

(The United States Atomic Energy Commission in March awarded a contract for a one-year study of the problems involved and ways to build a "nuclear powered reciprocating engine" for a railroad locomotive. The contract was given the Baldwin-Lima Hamilton Corp. of Philadelphia and the Denver and Rio Grande Western Railroad.)

Russian trains already run on wider tracks than most of the world's railroads — five feet, compared with the four foot eight and one half inch standard in America and most of Europe.

#### WIDER IN FUTURE.

But Moralevich thinks that even the five foot guage will be too narrow for the Russian trains of the future. He proposes a fifteen foot guage for mainline expresses connecting important centers in a nation as big as all North America from Mexico to Alaska.

Each passenger car would resemble a small ocean liner on wheels.

Illustrations accompanying Moralevich's article in "Technical Youth" show roomy, two-story coaches, studded with restaurants and lounges.

These Russian coaches of the future will have air conditioning. The author envisages baths and showers as standard equipment in the compartments, and perhaps even a swimming pool. He thinks it may even be possible to install a motion picture hall.

#### LARGER FREIGHTS.

Atomic drawn freight cars would also be three times as high and broad as today's standard models. They would carry up to 1,600 metric tons of freight, twenty-five times the present load capacity.

Sixty-five miles an hour is considered fast for Soviet trains these days. And the author acknowledges that "even at this speed the cars begin to sway, which passengers find tiring."

The atomic train of the future will more than double present top speeds. Passengers and freight can be delivered from Moscow to Leningrad, 400 miles, in three or four hours.

Travelers breakfasting in Moscow would be able to eat supper in Odessa, 750 miles to the south on the Black Sea.

Moralevich suggests that the only major technical problem to be solved is the development of an atomic engine.

But he is confident that Soviet science, having "created the atomic power station before all other countries," will be able to turn out a safe and compact atomic engine.

The engineer sees these super-gauge trains only for main lines. Russian standard guage equipment would continue to serve on feeder lines.

How soon will Moralevich's dream come true? He ventures that many of us not only will see such comfortable railway liners (in our own lifetimes)—we shall enjoy many interesting trips in them.