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Left—Gear for retractable landing gear efficiently milled on No. 12 Plain Milling Machine.

Right—Accurately sizing base of cylinder on No. 20 Plain Grinding Machine.

Providence, R.I., U.S.A.
FLOATING POWER

Back in '29, when the water supply in Tacoma, Washington, was so low that the hydroelectric stations could not generate enough electricity for the city's requirements, the U.S.S. Lexington—a turbine-electric drive airplane carrier—supplied the power necessary to tide the city through the emergency.

A year later on the opposite side of the country, the Jacona, a ship built during the last war, was made into a floating power plant by installing two 10,000-kw turbine-generators in its hull. It is at present in service on the Piscataqua River near Portsmouth, N. H.

General Electric is now studying the possibilities of a 50,000-kw floating power plant, which could be towed through America's coastal and inland waterways and hooked up to regular distribution lines to generate electricity in emergencies. Such a generating station could be housed in a hull similar to that of a lake freighter.

GIANT ATOM SMASHER

So powerful that its atom-smashing beam of ions would melt an ordinary brick as fast as a blowtorch would melt a pound of butter will be the U. of California's new 100,000,000-volt cyclotron. The 4900-ton giant—16 times more powerful than the present outfit—will generate atomic energies greater than any now in existence except in distant stars or elsewhere in cosmic space.

Atomic particles will be fed into a circular chamber where they will receive successive "kicks," whirling them around in continually widening circles until they reach a window or port on the side of the chamber. The element to be bombarded will be placed over this window where it will receive the full force of the ion beam.

For this machine General Electric is building electric equipment, which will occupy the space of a two-story house. The chief function of this equipment will be to make ordinary electric current capable of operating the giant atom smasher.

DETECTIVE STORY

Albany Hospital was in an uproar. The technicians in charge of the hospital's radium supply had lost a radium "needle"—only 3.3 milligrams to be sure, but enough to burn a person seriously if the needle were caught for long in his shoe or clothing.

An appeal for help was sent to the General Electric Research Laboratory in Schenectady for a "Geiger Counter"—an electric "ear" which detects and amplifies the otherwise inaudible "explosion" of the radium as it breaks down.

When Dr. C. W. Hewlett (N. C. State, '06) of the G-E Research Laboratory entered the suspected operating room, the counter immediately began to "cluck" its warning of radioactivity nearby. After a false start, the counter took to the trail like the Hawkshaw it is, and eventually, as Dr. Hewlett lowered it to the floor in front of a radiator, the clucks became barks. And there, snuggled against the wall under the radiator, was the missing radium.