POPULAR SCIENCE MONTHLY

Ohio.

forest of thick columns. Standing within the Baldwin Reservoir, one could readily imagine himself in a

great cathedral.

The volume of concrete used in

making the units -walls, 1196 col-

umns, 2208

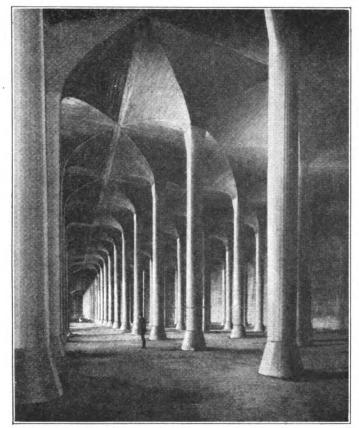
groined-arch pan-

els, and as many

sections of floor

slab-amounted to 104,100 cubic yds.

Reservoir Roofed like a Cathedral



A forest of columns, 35 feet high, supports the enormous roof

Uncle Sam Builds Huge Army Tanks

TANKS with many times the terrible destructive force of those that proved so deadly in the closing months of the Great War are being developed in experiments at Camp Meade. The illustration shows a lately evolved model splintering trees on the testing ground.

Not all of the experimental work is with fighting tanks. Tanks that can transport large guns, ammunition, infantry, signal apparatus, construction material, safely and rapidly for miles over ground deeply pitted with shell holes and blocked by obstructions are vital to the success of the terrible fighting tank.

"BALSAM wool," a new heat insulator and sound-deadening material for buildings, excelled only by human hair and sheep's wool in insulating efficiency, is prepared from pulp, wood bark, and sulphite screenings. It is flexible and resistant to fire and water. It weighs only 253 pounds to 1000 square feet.



Testing one of the huge new army tanks over rough country

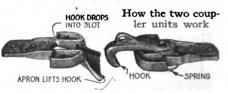
THIS covered reservoir of reinforced concrete, an unusual piece of construction on account of the magnitude of its dimensions, was completed recently for the waterworks of Cleveland, Its enormous roof, approxi-mately 1000 feet long and 500 feet wide, consists of groined-arch panels, supported by a

Toothpaste Tubes Filled by Machinery

HOW machinery puts toothpaste, cold cream, and shaving cream into the tubes is pictured above.

The empty tubes, in sockets, run on an endless band under a nozzle, where they are filled with the cream preparation drawn from a vat. After the filling, they are carried to a sealer that clamps together the open ends, bends them over, and stamps them into a tight seal. The tubes are held in place by the semicircular metal strip shown at the left until they are directly above a chute, which conveys them to a packing box.

Automatic Car Coupler Saves Injury to Crew



A^N AUTOMATIC safety coupler for mine cars has been perfected to lessen the number of casualties caused by the crushing of hands and bodies of workmen in making up trains of cars and later in uncoupling them.

The coupler is made in two sections, one fitting on the rear of the car and the other on the front. When two cars thus fitted are rammed together, an apron on one section of the coupler raises a hook on the other. This hook immediately drops into a slot in the first apron.

Sufficient play is allowed in the hook connection to prevent breaking of the coupler due to impact when the train is started with a jerk.

WHEN soft coal is burned in the furnace, soot can be removed quickly and easily from flues and heating surfaces by throwing a pound of common salt, thoroughly dried, on the burning fuel bed. Immediately upon charging with salt the furnace becomes filled with dense, white fumes.

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