



At the discharge terminal the car runs off the wire ropes onto fixed semicircular rails so curved as to dump the load and turn the car upside down, ready for return to the loading terminal

Aerial Tramway Loads Cars

COAL from the pit-head travels automatically to the coal-cars down an aerial tramway in a mine at Peck's Run, West Virginia. The coal drops through a chute at the mine into trams, each equipped with four double-flanged wheels running on two parallel wire ropes. The cars are hauled by an endless rope, and are loaded and unloaded automatically while in motion.

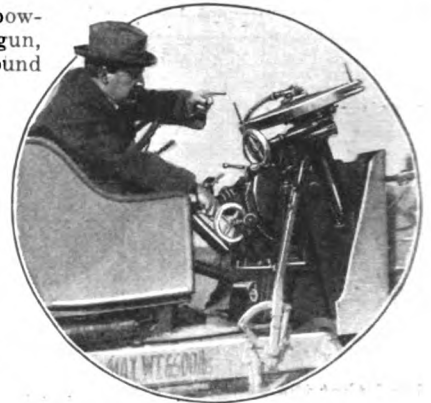
The track ropes are divided into short sections by towers. Power is supplied either by gravity—in which case the loaded cars pull the empty ones up the hill—or by a gasoline motor at the loading tower.

The automatic loader is a patented mechanism and consists of a bin holding exactly a tramcar load placed just over the tracks. The bin has a bottom discharge gate held in place by a latch that is tripped by the car as it approaches.

At the discharge tower the car runs off the track ropes on to fixed semicircular rails so curved as to reverse the car by dropping the forward end and turning it back toward the loading terminal, upside down. As the car turns over, the coal slides into the chute above the railroad tracks.

Army Tests Centrifugal Gun

A SMOKELESS, powderless machine gun, that fires 1200 round bullets a minute, was tested recently by the New York National Guard. The gun is mounted on a one-ton motor-truck with a powerful gasoline engine carried on the rear to generate the power that "fires" the gun.



A heavy flywheel, rotating at high speed, develops enough force to project a bullet which will kill at 2000 yards

Centrifugal force developed by a heavy flywheel rotating at a high rate of speed gives the new gun sufficient range and penetration to kill at 2000 yards. From the magazine the bullets pass in unbroken stream through a tube leading to the center of the disk. From this point they drop into grooves on the face of the flywheel, through which they slide to the circumference, and are thrown out through an open slit at a velocity of over 1000 feet a second. The gun is elevated and trained by worm gears similar to

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The gasoline motor that generates power to "fire" the gun, is mounted on the rear of a one-ton truck

those used on big naval guns, for the whirling wheel acts as a gyroscope, and makes it impossible to aim by hand. Allowing for the difference in muzzle velocity, the shooting is as accurate as that of a machine gun using cartridges.

Weight Vanishes—Can Breathing Exercises Overcome Gravity?

SIXTY pounds of human weight suddenly and mysteriously vanished the other day. Where did it go?

Nearly every one is familiar with the lifting game in which four persons, after breathing deeply in unison, lift a fifth person easily with their finger-tips. The lifters always agree that the subject seems to have lost weight. Does the subject actually lose weight, or is it an illusion? To seek the answer, five persons

recently tried the experiment on the platform of a sensitive scale. At the outset the combined weight of the experimenters was 712 pounds, but when the lift was made, according to Hereward Carrington, Ph.D., research officer of the American Psychical Institute, "these surprising results were noted: On the first and second trials, there was a loss of weight amounting to 52 pounds. On the third, fourth, and fifth lifts, 60 pounds were lost."



The combined weight of the experimenters as the four men placed their finger-tips under the subject, was 712 pounds



When the men held their breath in unison and lifted, the scale indicator dropped from 712 to 652 pounds

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