

ABSTRACT

BEDROCK DRILLING AND EXCAVATING APPARATUS

A bedrock drilling and excavating apparatus receives power from a rotational power source to drive a drill to strike and shatter bedrock under the gravity of the apparatus and reciprocal vibrations of a pneumatic unit located on the apparatus. The apparatus includes a coupling device to couple with the rotational power source and an air intake vibration structure, a coupling sleeve which has one end coupling with the lower end of a coupling axle and a connector which further couples to the pneumatic unit, and a drill coupling to the pneumatic unit. The pneumatic unit drives the drill to vibrate up and down reciprocally to strike and shatter bedrock. The drill has a drill shell which is alterable according to the diameter of the service shaft without changing the diameter of the pneumatic unit. The drill shell has a plurality of conical drill gimlets mounted thereon in different biased angles to shatter the bedrock and improve drilling and excavating effect.

(FIG. 1)