CLAIMS

1. A wire saw excavation method with ~~the~~ characteristics of cutting an~~the~~ edge line and ~~the~~ grid-type cutting lines of cutting section inside the edge line into a removable size at one time by wiring of wire at each direction to ~~the~~ multi directional pulleys mounted in horizontal, vertical and diagonal directions to~~of~~ ~~the~~ entry arms which are inserted into several entry holes selectively perforated at intersections of the edge line~~s~~ and the grid-type cutting lines inside the edge line on a~~the~~ target surface, wiring each wire-saw on pulleys in a same direction inserted into adjacent entry holes~~by gathering each wire-saw at the horizontal, vertical and diagonal directions~~, which performs the cutting of each cutting section while each rotates in different directions, ~~to the driving roller for each direction~~ and driving ~~each~~ a driving roller where a part of the wire-saw is winded with a~~the~~ bearing capacity of a~~the~~ support frame having a matrix structure corresponding to the edge line and the cutting lines for supporting the ~~inserted~~ entry arms~~holes from the back~~ in a direction towards the target surface while moving the driving roller in an opposite direction to insertion of the entry arms in order to divide and cut a~~the~~ full surface of ~~the~~ a rock subject to excavation into a removable size at one time by using the wire-saw.

2. An excavating apparatus for dividing and cutting a~~the~~ whole surface at once by driving multidirectional entry arm pulleys; and a plurality of wire-saws wired on the multidirectional entry arm pulleys wherein each of the multidirectional entry arm pulleys comprises an entry arm and a plurality of pulleys, configured for

~~wherein~~ the multi-directional entry arm pulleys ~~are~~ to be inserted into entry holes where cutting lines of the whole surface of an excavation target intersect and to be supported by a support frame having a matrix structure corresponding to an edge line and grid-type cutting lines of cutting section inside the edge line,

~~wherein~~ the plurality of~~two or more~~ pulleys ~~are~~ to be mounted in at least one direction of horizontal, vertical and diagonal directions at an end of the entry arm,

~~wherein a number of the entry arm pulleys to be inserted into the entry holes varies depending on a number of intersecting cutting lines and cutting environments,~~

~~wherein~~ the plurality of wire-saw~~s~~ ~~is~~ to be wired on the multi-directional entry arm pulley~~s~~ inserted into each entry hole in each direction in the same entry hole to match with the cutting lines,

~~wherein~~ each~~the wired~~ wire-saw ~~is~~ to be wired on pulleys in a same direction inserted into adjacent entry holes and to be driven to cut the cutting lines in all directions at the same time,~~connected to and driven with a wire-saw in the same direction wired to an adjacent entry hole,~~

and comprising a driving roller configured for a part of the wire-saw to be winded to be driven and to move in an opposite direction to insertion of the entry arm, and configured for

~~wherein~~ the whole surface ~~is~~ to be cut at once along the edge line and the grid-type of cutting section inside the edge in each direction without reciprocal interference, even if the wire-saw in the horizontal, vertical and diagonal direction wired in the entry hole rotates in a narrow space by a function of rotating in different directions of the multi-directional entry arm pulleys inserted into the entry holes.