

JAR ENHANCER

ABSTRACT

There is disclosed a tool for enhancing the impact delivered to an object stuck in a well bore by means of a jar having a first tubular member connected to the object and a second tubular member having a hammer arranged to deliver an upward blow to an anvil on the first member in response to raising and a downward blow in response to lowering of the second tubular mandrel member with respect to the first member, the tool comprising a first tubular member having a lower end adapted to be connected to said second tubular member of the jar for raising and lowering therewith, a second tubular member vertically reciprocable with respect to the first member to form an annular space between them and having an upper end adapted to be connected to a well pipe string above it, and first and second sets of upper and lower longitudinally spaced seal rings within the annular space and sealably slidable with respect to equal diameter portions of each of the tubular members to form upper and lower fluid chambers between the upper and lower seal rings, and shoulders on the tubular members in the annular space so arranged that, upon filling of the chambers with a compressible fluid, raising of the second member will compress the fluid in the upper and lower chambers to enhance the impact of an upward jar and lowering of the second member will compress the fluid in the lower chamber to enhance the impact of a downward jar.

Figure 1