We Claim:

1. An apparatus for sealing an open end of a pipe having a lumen, in connection with fluid pressure testing of the pipe, comprising:

an annular front plate positioned against the open end face of the pipe, said front plate providing a flange extending outwardly of the pipe;

a solid back plate positioned transversely within the pipe lumen, said back plate having a front face directed forwardly toward the pipe's open end, a back face directed rearwardly and a perimeter surface defining a clearance with the pipe's inner surface, said back plate being axially movable within the lumen;

an external gripping means, positioned around the pipe, for compressing inwardly and circumferentially so as to frictionally engage the outer surface of the pipe, said external gripping means comprising an annular external compression ring mounted on a segmental external gripper ring, said rings having oppositely beveled surfaces in contact;

an internal gripping means, positioned within the pipe, for compressing outwardly and circumferentially so as to frictionally engage the inner surface of the pipe, said internal gripping means comprising an annular internal compression ring positioned within a segmental gripper ring, said rings having oppositely beveled surfaces in contact;

said external and internal gripping means being positioned in opposed relationship;

the back plate being positioned directly behind the internal gripping means;

an annular deformable resilient sealing member carried by the back plate along its front edge whereby it may be axially compressed against the internal gripping means;

an outer nut and bolt assembly, connecting the front plate flange with the external compression ring, for pulling the compression ring toward the front plate so as to actuate the external gripping means to frictionally engage the outer surface of the pipe;

an inner nut and bolt assembly, connecting the front plate with the back plate, for pulling the back plate toward the front plate so as to actuate the internal gripping means to frictionally engage the inner surface of the pipe and to deform the sealing member into sealing engagement with the pipe to seal the front end of the clearance;

said back plate forming a pair of ports extending therethrough from its front face to the perimeter surface, one such port terminating at the lower end of the back plate and the other port terminating at its upper end, when in use, whereby the one port may be used to fill the pipe lumen with pressurizing fluid and the other port may be used to vent air from the lumen.

2. A method for sealing and filling the lumen of a pipe having an open end, in preparation for fluid pressure testing of the pipe, comprising:

positioning a circumferentially extending external gripping assembly around the outer surface of the pipe;

transversely positioning an axially movable, solid, back plate, having front, back and perimeter surfaces, and a circumferentially extending internal gripping assembly within the pipe lumen, said back plate carrying a deformable, resilient, annular sealing member along its front edge and being positioned directly behind the internal gripping assembly;

positioning an annular front plate against the end face of the pipe's open end;

separately connecting the front plate with each of the outer gripping assembly and the back plate using outer and inner threaded nut and bolt means respectively;

actuating the external gripping assembly by tightening the outer nut and bolt means so that said gripping assembly compresses inwardly against the outer surface of the pipe and frictionally engages said outer surface;

tightening the inner nut and bolt means to pull the back plate toward the front plate and thereby compress the sealing member against the internal gripping assembly, so that said sealing member deforms into sealing engagement with the inner surface of the pipe, and to cause the internal gripping assembly to expand outwardly to compress against the inner surface of the pipe and frictionally engage said surface; and

filling the pipe lumen with pressure-testing fluid by conveying it through a first port extending through the back plate from its front surface to the lower end of its perimeter surface and simultaneously venting displaced air from the pipe lumen through a second port extending through the back plate from the upper end of its perimeter surface to its front surface.