CLAIMS

1. A valve, comprising:

a plurality of segments attached end to end surrounding a central space, each of said segments having first and second circumferentially arranged projections extending toward said central space;

a valve body positioned within said central space, said valve body having an outer surface facing said segments and an inner surface defining a bore therethrough, said first and second circumferentially arranged projections being engageable with said outer surface for securing said valve body within said central space;

a closing member positioned within said bore, said closing member being movable between an open and a closed configuration;

a stem attached to said closing member for moving said closing member between said open and said closed configuration;

first and second connection members positioned at opposite ends of at least two of said segments for effecting end to end attachment of said segments; and

a liner overlying said inner surface of said valve body and surrounding said bore, said liner sealingly engaging said closing member when in said closed configuration,

wherein:

each of said segments comprises a channel extending circumferentially around and facing said central space, each of said channels being defined by first and second side surfaces located on opposite sides of said segments and a back surface extending between said side surfaces;

a shroud is positioned between said valve body and said segments, said shroud comprising a ring having first and second lobes positioned on opposite sides thereof, said first lobe having a first lobe surface facing toward said first side surface and said second lobe having a second lobe surface facing toward said second side surface, said first projections engaging said first lobe, said second projections engaging said second lobe; wherein

when said shroud is seated within said channels, at least a portion of said first and second lobe surfaces come into contact respectively with said first and second side surfaces such that said lobes deform toward a center of said channel.

2. The valve according to claim 1, wherein said first lobe surface is oriented angularly with respect to said first side surface and said second lobe surface is oriented angularly with respect to said second side surface when said lobes are undeformed.

3. The valve according to claim 1, wherein said first and second lobe surfaces comprise convexly curved surfaces when said lobes are undeformed.

4. The valve according to claim 1, wherein a portion of said liner extends between said valve body and said first and second segments, said shroud sealingly engaging said portion of said liner.

5. A valve, comprising:

a plurality of segments attached end to end surrounding a central space;

a valve body positioned within said central space, said valve body having an outer surface facing said segments and an inner surface defining a bore therethrough;

a closing member positioned within said bore, said closing member being movable between an open and a closed configuration;

a liner overlying said inner surface of said valve body and surrounding said bore, said liner sealingly engaging said closing member when in said closed configuration;

a stem attached to said closing member for moving said closing member between said open and said closed configuration; and

first and second connection members positioned at opposite ends of at least two of said segments for effecting end to end attachment of said segments;

wherein:

each of said segments comprises a channel extending circumferentially around and facing said central space, each of said channels being defined by first and second side surfaces located on opposite sides of said segments and a back surface extending between said side surfaces;

a shroud is positioned between said valve body and said segments, said shroud comprising a ring having first and second lobes positioned on opposite sides thereof, said first lobe having a first lobe surface facing toward said first side surface and said second lobe having a second lobe surface facing toward said second side surface, said first projections engaging said first lobe, said second projections engaging said second lobe; wherein

when said shroud is seated within said channels, at least a portion of said first and second lobe surfaces come into contact respectively with said first and second side surfaces such that said lobes deform toward a center of said channel.

6. The valve according to claim 5, wherein said first lobe surface is oriented angularly with respect to said first side surface and said second lobe surface is oriented angularly with respect to said second side surface when said lobes are undeformed.

7. The valve according to claim 5, wherein said first and second lobe surfaces comprise convexly curved surfaces when said lobes are undeformed.

8. The valve according to claim 5, wherein a portion of said liner extends between said valve body and said first and second segments, said shroud sealingly engaging said portion of said liner.