the cover and the ring portion.

3. The ground improvement method according to claim 1 or 2, wherein a distance between a position of the bottom plate of the steel pipe and a lower end position of the steel pipe becomes at least half of a diameter of the steel pipe.

4. A decompression vessel for being installed in the earth and an inside of the vessel being decompressed by a vacuum pump, characterized by comprising:

a steel pipe to be placed as a vessel body in the earth;

a bottom plate provided on a bottom side of the vessel body; and

a cover for closing the vessel body,

wherein the cover has a structure in which the cover is put on a placed portion of the vessel body~~,~~ through an airtight member made of an elastic material,

the airtight member includes a high packing that is easily deformed and a low packing that is hardly deformed, and

the cover is brought into close contact with the placed portion through the airtight member by a negative pressure generated in operating the vacuum pump.

5. The decompression vessel according to claim 4, wherein the steel pipe includes a ring portion provided so as to

project from an inner surface in an upper portion thereof, and

the cover is put on the ring portion while the ring portion is used as the placed portion.~~, and~~

~~an airtight member made of an elastic material is provided between the cover and the ring portion.~~

~~6. The decompression vessel according to claim 5, wherein the airtight member includes a high packing that is easily deformed and a low packing that is hardly deformed.~~

6. ~~7.~~ The ground improvement method as in any one of claims 1 to 3, wherein the decompression vessel as claimed in claim 4 or claim 5 ~~in any one of claims 4 to 6~~ is installed in the earth.