CLAIM:

1. An underwater pipe assembly comprising:

a first pipe including a first pipe body extending along a longitudinal axis, and an annular first flange projecting radially and outwardly from a peripheral end of said first pipe body and having a first end surface and a second end surface opposite to said first end surface along the longitudinal axis;

a second pipe including a second pipe body extending along the longitudinal axis, and an annular second flange projecting radially and outwardly from a peripheral end of said second pipe body and having a first end surface that abuts against said first end surface of said first flange, and a second end surface opposite to said first end surface of said second flange along the longitudinal axis (L); and

a connector apparatus including a plurality of connecting units clamped around said first and second flanges, each of said connecting units including a clamp seat disposed on and covering said first and second flanges and having a first clamping portion, a first pad disposed between said first clamping portion and said second end surface of said first flange, a second pad disposed on said second end surface of said second flange, and a fastener operably and movably mounted to said clamp seat and having a second clamping portion facing said second pad,

said first clamping portion pressing said first pad against said second end surface of said first flange and said second clamping portion pressing said second pad against said second end surface of said second flange when said fastener is operated,

wherein said clamp seat of each of said connecting units further has a first lateral plate facing said second end surface of said first flange, a second lateral plate facing said second end surface of said second flange, and an intermediate plate interconnecting said first and second lateral plates, said first clamping portion being configured as a protrusion that protrudes from an end portion of said first lateral plate toward said first pad, said second lateral plate having a threaded hole formed in proximity to an end thereof for threaded connection with said fastener, said fastener being configured as a threaded bolt that includes a shank having said second clamping portion, and a head opposite to said second clamping portion and located externally of said second lateral plate,

wherein said first pad is configured to have an L-shaped cross section so that said first pad has an angled portion which protrudes toward said first lateral plate between said first clamping portion and said intermediate plate, and

wherein said second pad is configured to have an

L-shaped cross section so that said second pad has an angled portion which protrudes toward said second lateral plate between said second clamping portion and said intermediate plate.

~~2. The underwater pipe assembly as claimed in Claim 1, wherein said clamp seat of each of said connecting units further has a first lateral plate facing said second end surface of said first flange, a second lateral plate facing said second end surface of said second flange, and an intermediate plate interconnecting said first and second lateral plates, said first clamping portion being configured as a protrusion that protrudes from an end portion of said first lateral plate toward said first pad, said second lateral plate having a threaded hole formed in proximity to an end thereof for threaded connection with said fastener, said fastener being configured as a threaded bolt that includes a shank having said second clamping portion, and a head opposite to said second clamping portion and located externally of said second lateral plate.~~

~~3.~~ 2. A method of assembling underwater pipes, comprising the steps of:

(A) preparing a first pipe, a second pipe and a connector apparatus, the first pipe including a first

pipe body extending along a longitudinal axis, and an annular first flange projecting radially and outwardly from a peripheral end of the first pipe body and having a first end surface, and a second end surface opposite to the first end surface, the second pipe including a second pipe body extending along the longitudinal axis, and an annular second flange projecting radially and outwardly from a peripheral end of the second pipe body and having a first end surface and a second end surface opposite to the first end surface of the second flange along the longitudinal axis, the connector apparatus including a plurality of connecting units, each of the connecting units including a clamp seat having a first clamping portion, a first pad, a second pad, and a fastener having a second clamping portion;

(B) abutting the first end surfaces of the first and second flanges against each other;

(C) disposing the connecting units around the first and second flanges such that the clamp seats of the connecting units cover the first and second flanges, the first pads of the connecting units surround the second end surface of the first flange, the second pads of the connecting units surround the second end surface of the second flange, the first clamping portions of the clamp seats respectively face the first pads, and the fasteners of the

connecting units are respectively connected to the clamp seats and respectively face the second pads; and

(D) operating the fasteners of the connecting units such that the second clamping portions of the fasteners press and position the second pads against the second end surface of the second flange, and the first clamping portions of the clamp seats of the connecting units press and position the first pads against the second end surface of the first flange, thereby clamping the first and second flanges between the first and second clamping portions,

wherein the clamp seat of each of the connecting units further has a first lateral plate facing the second end surface of the first flange, a second lateral plate facing the second end surface of the second flange, and an intermediate plate interconnecting the first and second lateral plates, the first clamping portion being configured as a protrusion that protrudes from an end portion of the first lateral plate toward the first pad, the second lateral plate having a threaded hole formed in proximity to an end thereof for threaded connection with the fastener, the fastener being configured as a threaded bolt that includes a shank having the second clamping portion, and a head opposite to the second clamping portion and located externally of

the second lateral plate,

wherein the first pad is configured to have an L-shaped cross section so that the first pad has an angled portion which protrudes toward the first lateral plate between the first clamping portion and the intermediate plate, and

wherein the second pad is configured to have an L-shaped cross section so that the second pad has an angled portion which protrudes toward the second lateral plate between the second clamping portion and the intermediate plate.