What is claimed is:

1. A steel sheet pile wall comprising:

a steel sheet pile formed by hot rolling comprising claw-like Larssen-type joints formed on both ends thereof, wherein

a recessed groove in which a water cut-off material is filled is formed on an inner side of a claw bottom portion out of the joints connected to each other, a water cut-off material is charged into a recessed groove of one of the joints and a water-swellable rubber material is attached to inside of the recessed groove of the other joint.

2. The steel sheet pile wall according to claim 1, wherein

the steel sheet pile is a U-shaped steel sheet pile that is formed of a web and flanges, formed in a U shape as viewed in a cross sectional view, and formed with the Larssen-type joints on distal ends of the flanges,

an inclination angle (θ) of the flanges with respect to a normal line of a web surface ranges from 4° to 10°, and

an orthogonal-direction joint space allowance (dy) formed on the inner side of the claw bottom portion in