WHAT IS CLAIMED IS:

1. A backing device that is used in one-side welding equipment that joins together steel plates to be welded together and that carries out welding using backing flux, the device comprising:

a backing member,

wherein the backing member includes

a backing copper plate on which the backing flux is placed, the backing copper plate being disposed along the welding groove, and

a support frame configured to support the backing copper plate in such a manner that the backing copper plate is slidable in the direction of the welding groove, and

wherein the backing copper plate includes a plurality of copper plate pieces, each copper plate piece being joined together by a joining member,

wherein the support frame includes a plurality of rails disposed in the longitudinal direction of the backing copper plate on the underside of the backing copper plate and a support plate configured to support the rails.

2. The backing device according to Claim 1, wherein the joining member includes,

a joining bracket on which adjoining copper plate pieces are placed, and

a joining pin configured to join the joining bracket and the adjoining copper plate pieces placed on the joining bracket by being passed through through holes provided in advance, and

wherein a lower surface of the joining bracket has a protruding part capable of sliding along the support frame.

~~3. The backing device according to Claim 1, wherein~~

~~the support frame includes a plurality of rails disposed in the longitudinal direction of the backing copper plate on the underside of the backing copper plate and a support plate configured to support the rails.~~

~~4~~3. The backing device according to Claim 1, further comprising:

an air hose interposed between the support frame and a support structure configured to support the support frame, the air hose being configured to press the backing flux placed on the backing copper plate against the underside of the welding groove of the steel plates by expanding by compressed air.

~~5~~4. The backing device according to Claim 1, further comprising:

an elevating device configured to move the support structure upward and downward,

wherein, when the backing member is moved upward to the upper edge of the backing copper plate by the elevating device, the gap between the backing member and the steel plates is set smaller than or equal to 75% of the maximum expansion diameter of the air hose and the air pressure of the air hose is set between 0.05 and 0.5 MPa.

~~6~~5. A welding method in which welding is carried out by moving steel plates to be welded to a position corresponding to a backing device and pressing a backing member of the backing device along a welding groove in the steel plates, the method comprising the steps of:

moving a backing copper plate upward toward the welding groove in the steel plates by an elevating device, the backing copper plate having a length larger than or equal to the length of the welding groove;

pressing backing flux placed on the front surface of

the backing copper plate by expanding an air hose with compressed air injection, the air hose being interposed between a support frame configured to support the backing copper plate moved upward by the elevating device and a support structure configured to support the support rame; and

carrying out one-side welding by a welder of one-side welding equipment,

wherein the support frame includes a plurality of rails disposed in the longitudinal direction of the backing copper plate on the underside of the backing copper plate and a support plate configured to support the rails.

~~7~~6. The welding method according to Claim ~~6~~5, wherein the backing copper plate includes copper plate pieces joined together by joining members.