CLAIMS

1. A fender (10, 50) adapted to be mounted on a quay or the like (11), comprising:

a buffer portion (12) for relieving an impact at the time of mooring of a ship; and

a quay fixing portion (14a, 14b, 54a, 54b) for mounting the buffer portion on the quay or the like, wherein the quay fixing portion includes a fixing member (18a, 18b, 58a, 58b) having higher rust preventiveness than an iron material,

the fixing member is provided in the form of a flat plate in order to come into contact with the quay or the like as the quay fixing portion, and is bonded to a surface of the buffer portion via an adhesive at only a surface thereof on a side opposite to a side coming into contact with the quay or the like,

the fixing member is adapted to be formed with a through-hole (16a, 16b) in correspondence to a bolt (55a, 55b) projecting from the quay or the like so as to enable the bolt to pass through the through-hole, and

the fender is configured so that only the through-hole of the fixing member serves as a bolt-hole for mounting the quay fixing portion to the quay or the like.

2. The fender according to claim 1, wherein the fixing member is made of a material having smaller specific gravity than an iron material.

3. The fender according to claim 1 or claim 2, wherein the buffer portion is made of a rubber material, and the fixing member is made of a combustible material.

4. The fender according to claim 3, wherein the combustible material is synthetic resin material.

5. The fender according to claim 4, wherein the synthetic resin material is polyethylene.

6. The fender according to any one of claims 1 to 5, wherein the buffer portion includes a bumper plate (32) provided on a side coming into contact with the ship and a bumper plate fixing portion (34, 34a, 34b) for fixing the bumper plate, and the bumper plate fixing portion includes a bumper plate fixing member (38, 38a, 38b) having higher rust preventiveness than an iron material.

7. A quay incorporating a fender as claimed in any one of claims 1 to 6.

8. A method of manufacturing the fender as claimed in any one of claims 1 to 6, comprising the buffer portion for relieving an impact at the time of mooring of a ship and the quay fixing portion, employed for mounting the buffer portion on a quay or the like, including the fixing member having higher rust preventiveness than an iron material, including steps of:

preparing a fender material extending in a longitudinal direction so that a section in a short-side direction has the same shape by connecting a member corresponding to the buffer portion to a member corresponding to the quay fixing portion;

cutting the fender material in a direction intersecting with the longitudinal direction in a prescribed length with respect to the longitudinal direction;

providing a through-hole in the quay fixing portion on a position corresponding to a mounting bolt in the quay or the like serving as an installation location to pass through the fixing member;

wherein connection between the buffer portion and the fixing member occurs by bonding the two with adhesive at a side of the fixing member opposite to the side adapted to come into contact with the quay.

9. A fender (20, 30, 40, 50) adapted to be mounted on a quay or the like, comprising:

a buffer portion (12) for relieving an impact at the time of mooring of a ship; and

a quay fixing portion (24, 24a, 24b, 44a, 44b) for mounting the buffer portion on the quay or the like, wherein the quay fixing portion includes a fixing member (28, 28a, 28b, 48a, 48b) completely encased within the quay fixing portion and having higher rust preventiveness than an iron material wherein the buffer portion is made of a rubber material, and the fixing member is made of a combustible synthetic thermoplastic resin material.

10. The fender according to claim 9, wherein the fixing member is made of a material having smaller specific gravity than an iron material.

11. The fender according to claim 9, wherein the synthetic resin material is polyethylene.

12. The fender according to claim 9 to 11, wherein the quay fixing portion further includes a through-hole (26) for inserting a bolt for mounting the fender on the quay or the like, and the through-hole passes through the fixing member.

13. The fender according to any one of claims 9 to 12, wherein the buffer portion includes a bumper plate (32) provided on a side coming into contact with the ship and a bumper plate fixing portion (34, 34a, 34b) for fixing the bumper plate, and

the bumper plate fixing portion includes a bumper plate fixing member (38, 38a, 38b) having higher rust preventiveness than an iron material.

14. A quay incorporating a fender as claimed in any one of claims 9 to 13.

15. A method of manufacturing a fender as claimed in any one of claims 9 to 13, comprising a buffer portion for relieving an impact at the time of mooring of a ship and a quay fixing portion, employed for mounting the buffer portion on a quay or the like, including a fixing member having higher rust preventiveness than an iron material, including steps of:

preparing a fender material extending in a longitudinal direction so that a section in a short-side direction has the same shape by connecting a member corresponding to the buffer portion to a member corresponding to the quay fixing portion;

cutting the fender material in a direction intersecting with the longitudinal direction in a prescribed length with respect to the longitudinal direction; and

providing a through-hole in the quay fixing portion on a position corresponding to a mounting bolt in the quay or the like serving as an installation location to pass through the fixing member.