Claims

1. An operating device (1) for placing or retrieving bottle-like piece goods onto or from storage places of a picking device, comprising:

a gripping jaw assembly (100; 200) having

two profile-rod shaped gripping jaws (11a, 11b; 13a, 13b; 50a, 50b), having opposite lying inner surfaces (12a, 12b; 14a, 14b; 51a, 51b), extending in a first horizontal direction, wherein the first horizontal direction (X) corresponds to the direction for placing and retrieving piece goods,

wherein the gripping jaws (11a, 11b; 13a, 13b; 50a, 50b) are configured in such a manner that the distance of the inner surfaces (12a, 12b; 14a, 14b; 51a, 51b) at least in sections tapers in the downward direction, so that the inner surfaces (12a, 12b; 14a, 14b; 51a, 51b) are configured in such a manner that the bottle-like piece goods can be lifted from below, and

a first actuation unit (20, 21) coupled to the gripping jaw assembly (100; 200) for moving the gripping jaw assembly (100; 200) in the first horizontal direction (X).

2. The operating device (1) for placing or retrieving bottle-like piece goods onto or from storage places of a picking device as recited in Claim 1,

characterized in that the gripping jaws (13a, 13b) are configured as a round profile so that the inner surfaces (14a, 14b) are formed in a convex manner to each other.

3. The operating device (1) for placing or retrieving bottle-like piece goods onto or from storage places of a picking device as recited in Claim 1,

characterized in that the gripping jaws (11a, 11b; 50a, 50b) are configured as flat profiles having plane inner surfaces (12a, 12b; 51a, 51b).

4. The operating device (1) for placing or retrieving bottle-like piece goods onto or from storage places of a picking device as recited in Claim 3,

characterized in that the gripping jaws (11a, 11b) are rotatably mounted so that the gripping jaws (11a, 11b) with the aid of a second actuation unit (110a, 110b) are rotatable from a position gripping from below, in which the distance of the inner surfaces (12a, 12b) at least in sections tapers in the downward direction, into a clamping position, in which the inner surfaces (12a, 12b) of the gripping jaws (11a, 11b) are aligned parallel to each another.

5. The operating device (1) for placing or retrieving bottle-like piece goods onto or from storage places of a picking device as recited in Claim 3 or 4,

characterized in that the operating device has a third actuation unit (140) coupled to the gripping jaws (11a, 11b; 13a, 13b; 50a, 50b), by which the gripping jaws (11a, 11b; 13a, 13b; 50a, 50b) are movable toward and away from each other along a second horizontal direction (Y) transverse to the first horizontal direction (X).

6. ~~The~~ An operating device (1) for placing or retrieving bottle-like piece goods onto or from storage places of a picking device, comprising:

a tray (2) extending in ~~the~~ a first horizontal direction (X), having a placing and a retrieving side (2a),

a gripping jaw assembly (200) having

two gripping jaws (50a, 50b) movable toward and away from each other along a second horizontal direction (Y) transverse to the first horizontal direction (X), wherein the gripping jaws for carrying out the movement in the second horizontal direction (Y) are coupled to a third actuation unit (140),

wherein a pivot device (61a, 61b, 62a, 62b) is assigned to at least one gripping jaw (50a, 50b), which at the end of the gripping jaw has a catching section, which is, for catching a piece good situated between the gripping jaws (50a, 50b), at

least in sections pivotable in a region between the gripping jaws,

a sliding device (10) being arranged between the gripping jaws, for sliding a piece good from the tray (2), and

an actuation unit (20, 21) coupled to the gripping jaw assembly (200) for moving the gripping jaw assembly in the first horizontal direction (X).

7. The operating device (1) for placing or retrieving bottle-like piece goods onto or from storage places of a picking device as recited in one of Claims 3 through 6,

characterized in that the gripping jaw assembly (100, 200) has a fourth actuation unit (210, 211), and at least one of the gripping jaws (11a, 11b; 50a, 50b) is pivot-mounted at the gripping jaw assembly (100, 200) and is pivotable via the fourth actuation unit (210, 211).

8. The operating device (1) for placing or retrieving bottle-like piece goods onto or from storage places of a picking device as recited in one of Claims 3 through 7,

characterized in that the gripping jaws (11a, 11b) at least in sections have a web (25a, 25b) extending in the longitudinal direction.