CLAIMS

1. A horizontal conveying carriage for horizontally conveying a conveyed object, the horizontal conveying carriage comprising:

a carriage body including: a base part on which a picked-up conveyed object is placed; a drive wheel; and a steering wheel;

a forklift attached to the carriage body, and configured to pick up a conveyed object from an outside to the base part and unload the conveyed object from the base part to the outside;

an extending and shrinking mechanism configured to extend and shrink the forklift in a front-and-rear direction;

a lifting and lowering mechanism configured to lift and lower the forklift in a vertical direction;

a supporting mechanism provided to prevent the forklift from being in a cantilever state while picking up/unloading the conveyed object, the supporting mechanism being configured to support the forklift from a lower side;

an own position estimation unit configured to estimate an own position of the carriage body;

a positional relation recognition unit configured to recognize a positional relation between the own position and the conveyed object;

a control unit configured to control movement of the carriage body using the drive wheel and the steering wheel and to control an operation of the forklift using the extending and shrinking mechanism and the lifting and lowering mechanism based on the own position and the positional relation; and

a converting mechanism configured to limit an operation of the lifting and lowering mechanism of the forklift and convert the operation of the lifting and lowering mechanism into an operation for lifting the supporting mechanism.

2. The horizontal conveying carriage according to claim 1, wherein the supporting mechanism is formed of a scissors link mechanism in a form of scissors that is disposed between a floor surface and the forklift.

3. The horizontal conveying carriage according to claim 1 or 2, wherein the control unit is remotely controlled from an outside through a wireless or wired communication unit.

4. The horizontal conveying carriage according to any one of claims 1 to 3, wherein the horizontal conveying carriage is able to autonomously travel while estimating the own position based on drawing data representing information on a position of a construction site.