C L A I M S

1. A supply apparatus, comprising:

a first conveyance portion that is configured to remove a plurality of processing targets from a feeder in which the processing targets are placed and that is configured to convey the processing targets along a first conveyance direction;

a second conveyance portion that is disposed on a downstream side of the first conveyance portion and in which a plurality of conveyance portions having mutually different conveyance directions are sequentially connected and convey the processing targets while bringing the processing targets in one direction in the width direction of the conveyance path, the second conveyance portion conveying the processing targets from an upstream side to a downstream side along a second conveyance direction; and

a third conveyance portion that is disposed on a downstream side of the second conveyance portion and that is configured to convey the processing targets along a third conveyance direction while separating the processing targets from each other at a predetermined pitch.

2. The supply apparatus according to claim 1, wherein the first conveyance direction and the third conveyance direction are opposite directions to each other.

3. The supply apparatus according to claim 1 or 2, wherein:

the second conveyance portion includes:

a first side-alignment conveyance portion provided on the downstream side of the first conveyance portion along the first conveyance direction;

a second side-alignment conveyance portion provided on a downstream side of the first side-alignment conveyance portion along a direction intersecting the first side-alignment conveyance portion; and

a third side-alignment conveyance portion provided on a downstream side of the second side-alignment conveyance portion along a direction intersecting the second side-alignment conveyance portion.

4. The supply apparatus according to any one of claims 1 to 3, wherein the third conveyance portion includes a recovery portion that is adjacent to downstream ends of the plurality of conveyance portions in the second conveyance portion and to the third conveyance portion and that is configured to recover some of the processing targets that have been brought in the one direction in the second conveyance portion, among the processing targets.

5. The supply apparatus according to claim 4, further comprising: a fourth conveyance portion that is disposed on a downstream side of the recovery portion and that is configured to convey, to the feeder, the processing targets recovered by the recovery portion.

6. The supply apparatus according to any one of claims 1 to 5, wherein:

the first conveyance portion includes:

a removal conveyance portion that is configured to remove the processing targets;

a downward-inclined conveyance portion that is disposed on a downstream side of the removal conveyance portion and that is inclined downward along the first conveyance direction; and

an upward-inclined conveyance portion that is disposed on a downstream side of the downward-inclined conveyance portion and that is inclined upward along the first conveyance direction.

7. The supply apparatus according to claim 6, wherein:

a conveyance speed of the downward-inclined conveyance portion is lower than a conveyance speed of the removal conveyance portion, and

a conveyance speed of the upward-inclined conveyance portion is higher than a conveyance speed of the downward-inclined conveyance portion.

8. The supply apparatus according to any one of claims 1 to 7, wherein the second conveyance portion includes a wall portion facing in a direction in which the processing targets are brought in the one direction in the width direction of the second conveyance portion.

9. The supply apparatus according to claim 8, wherein the wall portion includes an auxiliary conveyance portion that is configured to actively or passively convey the processing targets from the upstream side to the downstream side of the second conveyance portion along the second conveyance direction.

10. The supply apparatus according to any one of claims 1 to 9, wherein the third conveyance portion is configured to supply the processing targets to a sorting apparatus that is configured to sort the processing targets according to each destination.