removing the object in the accommodating element (20) that passes by the cleaning device and is on the second channel (15); and

a control system (80) electrically connected to the pushing rods (30), the at least one side rod (50), the at least one detector (40) and the cleaning device, and the control system (80) controlling the at least one third pushing rod (33) according to a detection outcome of the at least one detector (40).

2. The automatically cycling detecting-and-sorting device as claimed in claim 1, wherein the at least one side rod (50) further includes:

a second side rod (52) disposed above the first channel (14) and pushing the accommodating element (20) that is disposed between the feeding region (11) and the sort-and-remove region (12) toward the sort-and-remove region (12); wherein a pushing distance of the second side rod (52) equals a front-rear length of one accommodating element (20) or a sum of the front-rear lengths of multiple accommodating elements (20); wherein an amount of the accommodating element (20) that corresponds to the pushing distance of the second side rod (52) is equal to an amount of the at least one third pushing rod (33); wherein the second pushing rod (32) pushes the corresponding accommodating element (20) into a pushing range of the second side rod (52); and

a third side rod (53) disposed above the first channel (14) and pushing the accommodating element (20) that is disposed between the sort-and-remove region (12) and the discharging region (13) toward the discharging region (13).

8. The automatically cycling detecting-and-sorting device as claimed in claim 7, wherein a bottom of an inner surface of the cup body (22) is spherical and protrudes downward.

9. The automatically cycling detecting-and-sorting device as claimed in any one of claims 1 to 8, wherein ~~the~~ each of the multiple accommodating ~~element~~ elements (20) has

two side rod recesses (212) respectively formed in a front side and a rear side of ~~the~~ said accommodating element (20) for the at least one side rod (50) to be inserted into and abut one of the side rod recesses (212).