

Drawing

figure 1 : shown a newly design ladder when it is expanded, the linkage B can be able to slid in and out of the ladder horizontally. There are four linkages (linkage B) on left and right side of the ladder, these will support the ladder not to fall aside when the worker is working on top of the ladder. The housing A is for keeping the linkage B.

Figure 2 : shown the ladder did not expand, and it is put slanted against the wall, linkage B is sliding out of the ladder for balancing, so that the ladder will not slant and fall to left or right side.

Figure 3 : shown a housing A that allow linkage B to slide in (to extend the linkage B out of the ladder for balancing) and out (for keeping the linkage B inside the ladder) of the ladder.

Claims

1. the new ladder can be supporting and holding for slant and fall, during worker is working on top of the ladder.
2. the new ladder can be balanced from falling to the side, because when the ladder is not expanded when using, it will unbalance and slant and fall to the left or right side. While work load is unbalance on top of the ladder.
3. the four linkages can be collected and extended from the ladder when it is using, while it also can be collected inside the ladder.