Claims

1. An arrangement for mounting a plane (2) on a wall (1), the arrangement comprising said plane (2) and, supporting said plane (2), a first support arm (4) and a second support arm (5), which support arms (4, 5) are connectable to the wall (1) by their first ends (4', 5') by means of ~~a~~ first joint arrangements (6, 7) provided with ~~a~~ substantially vertical turning axeis and corresponding to each support arm (4, 5) so that the support arms (4, 5) are turnable in a substantially horizontal levelplane in relation to the wall (1), and the support arms (4, 5) being mounted in connection with the plane (2) by their second ends (4'', 5'') by means of ~~a~~ second joint arrangements (10, 11) connected to the second ends (4'', 5'') of the support arms (4, 5), the second joint arrangements (10, 11) of the support arms (4, 5) comprising ~~a~~ joints (14, 15) provided with a substantially horizontal turning axis, whereby said plane (2) is turnable to a substantially horizontal usage position and a substantially vertical storage position by means of said joints (14, 15) provided with thea substantially horizontal turning axis, c h a r a c t e r i z e d in that ~~and wherein~~ the second joint arrangements (10, 11) comprise~~s~~ ~~a~~ substantially vertical joint shafts (12, 13) arranged in connection with the second ends (4'', 5'') of the support arms (4, 5), and in that the joints (14, 15) provided with thea substantially horizontal turning axis arei~~s~~ arranged in said substantially vertical joint shafts (12, 13), ~~c h a r a c t e r i z e d in~~ and in that the substantially vertical joint shafts (12, 13) of the second joint arrangements (10, 11) comprise~~s~~ in the vertical direction of the support arms (4, 5) ~~a~~ portions extending below the second ends (4'', 5'') of the support arms (4, 5), and in that the joints (14, 15) of the second joint arrangements (10, 11), which arei~~s~~ provided with thea substantially horizontal turning axis arei~~s~~ arranged directly, or indirectly by connecting parts (28), to the portions of the vertical joint shafts (12, 13), which extend~~s~~ below the second ends (4'', 5'') of the support arms (4, 5).

~~2. An arrangement as claimed in claim 1, c h a r a c t e r i z e d in that the joint (14, 15) of the second joint arrangement (10, 11), which is provided with a substantially horizontal turning axis, is arranged to the portion of the vertical joint shaft (12, 13), which extends below the second end (4'', 5'') of the support arm (4, 5).~~

2~~3~~. An arrangement as claimed in claim 1 ~~or 2~~, c h a r a c t e r i z e d in that ~~a~~ joint shafts (16, 17) of the joints (14, 15) of the second joint arrangements (10, 11), ~~-~~provided with thea substantially horizontal turning axis, arei~~s~~ arranged

to run through the portions of the substantially vertical joint shafts (12, 13), which extends below the second ends (4'', 5'') of the support arms (4, 5).

34. An arrangement as claimed in any one of the preceding claims 2 or 3, characterized in that the substantially vertical joint shafts (12, 13) of the second joint arrangements (10, 11) are arranged to run in a substantially vertical direction through the second ends (4'', 5'') of the support arms (4, 5).

45. An arrangement as claimed in any one of the preceding claims, characterized in that the arrangement comprises a support structures (18, 19) connected to the each support arms (4, 5), the support structures (18, 19) being arranged in connection with a bottom (2f) of the plane (2), and the support structures (18, 19) connects to the corresponding support arms (4, 5) by means of the joints (14, 15) of said second joint arrangements (10, 11), which are provided with the substantially horizontal turning axis.

56. An arrangement as claimed in claim 45, characterized in that the substantially vertical joint shafts (12, 13) of the second joint arrangements (10, 11) forms a first joint parts of the joints (14, 15) provided with the substantially horizontal turning axis, and the support structures (18, 19) forms a second joint parts of the joints (14, 15) provided with the substantially horizontal turning axis.

67. An arrangement as claimed in claim 4 or 5 5 or 6, characterized in that the support structures (18, 19) comprises a first portions (18', 19') oriented substantially vertically in the substantially horizontal usage position, and in connection with them it a second portions (18'', 19')' oriented substantially horizontally in the substantially horizontal usage position and arranged in connection with the bottom (2f) of the plane (2), whereby in the substantially horizontal usage position said substantially vertically oriented first portions (18', 19') of the support structures (18, 19) forms the portions of the support structures (18, 19), which are connected to the joints (14, 15) provided with said horizontal turning axis.

78. An arrangement as claimed in claim 67, characterized in that in the substantially horizontal usage position the substantially horizontally oriented second portions (18'', 19'') of the support structures (18, 19) are a support structures running substantially in the lateral direction of the plane (2).

89. An arrangement as claimed in any one of claims 4 to 7 5 to 8, characterized in that the bottom (2f) of the plane (2) comprises recesses (20, 21), that match the second portions (18'', 19'') of the support structures (18,

19) to be positioned in connection with the bottom (2f) of the plane (2), to receive said portions (18'', 19'') of the support structures without adding to the height of the plane (2).

9~~10~~. An arrangement as claimed in any one of the preceding claims, c h a r a c t e r i z e d in that the joint shafts (16, 17) of the joints (14, 15) provided with the~~a~~ horizontal turning axis are~~is~~ arranged over the top surface (2e) of said plane (2) when the plane (2) is in the substantially horizontal usage position.

10~~11~~. An arrangement as claimed in any one of the preceding claims, c h a r a c t e r i z e d in that the first joint arrangements (6, 7) comprise~~s a~~ substantially vertical joint shafts (8, 9) which are~~is~~ arranged to run in a substantially vertical direction through the first ends (4', 5') of the support arms (4, 5).

11~~12~~. An arrangement as claimed in any one of the preceding claims, c h a r a c t e r i z e d in that the substantially vertical joint shaft (13) of the second joint arrangement (10, 11) of the second support arm (5) is arranged to slide in a substantially vertical direction in relation to the second end (5'') of the second support arm (5), whereby said joint shaft (13) forms a height adjustment bar by means of which a~~the~~ rear end (2b) of the plane (2) may be lowered down to achieve an inclined position for the plane (2), and raised back up to restore the substantially horizontal position of the plane (2).

12~~13~~. An arrangement as claimed in claim 11~~12~~, c h a r a c t e r i z e d in that the second support arm (5) has a forced-control element which guides the substantially vertical joint shaft (13) of the second joint arrangement (11) of the second support arm (5) to lower as the second support arm (5) is turning away from the wall (1) and to rise when the second support arm (5) is turning towards the wall (1).

13~~14~~. An arrangement as claimed in claim 12~~13~~, c h a r a c t e r i z e d in that the substantially vertical joint shaft (13) of the second joint arrangement (11) of the second support arm (5) comprises a portion extending in the vertical direction over the second end (5'') of the second support arm (5), and in that the forced-control element is a guide rod (23), which guide rod (23) is by its first end (23') fixed in a pivoted manner in connection with the portion of the vertical joint shaft (13) of the second joint arrangement (11), which extends over the second end (5'') of the second support arm (5), and in that the guide rod (23) is fixed in a pivoted manner by its second end (23') to the second support arm (5) to the portion between the first joint arrangement (7) and the second joint arrangement (11).

1415. An arrangement as claimed in any one of the preceding claims, c h a r a c t e r i z e d in that the support arms (4, 5) comprises in the portion between the first joint arrangements (6, 7) and the second joint arrangements (10, 11) an obliquely running portion so that the first ends (4', 5') and second ends (4'', 5'') of the support arms (4, 5) are at mutually different heights.