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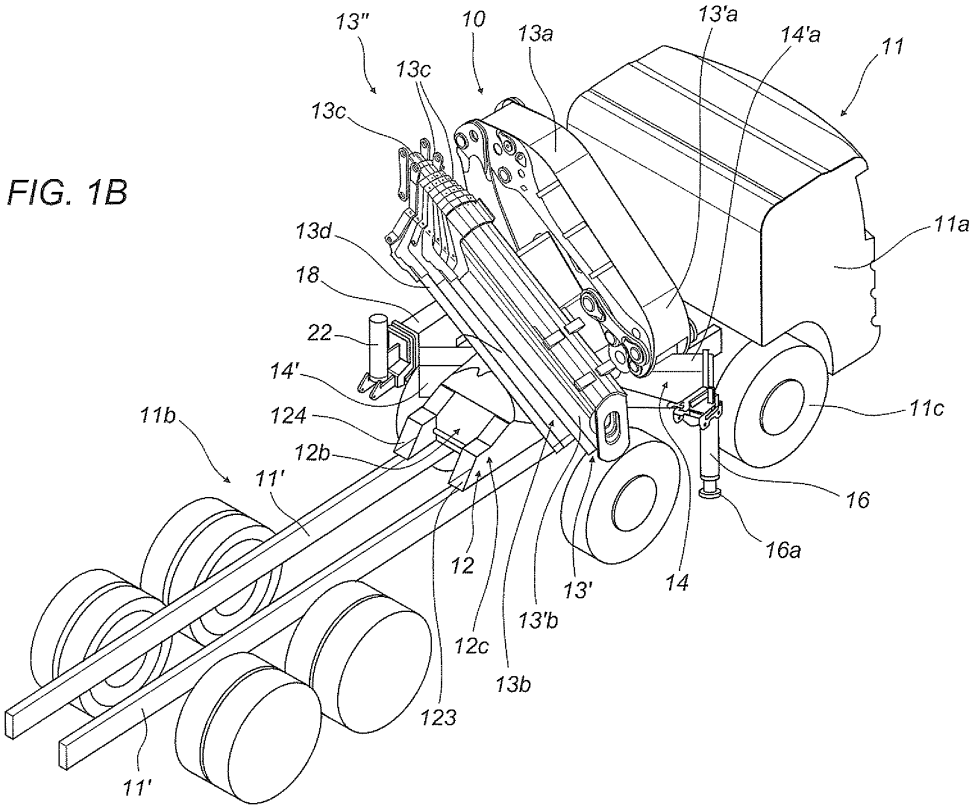
Claims 16-17, 19-25, 29-30, 33-34, 38-47 are deemed to be abandoned due to non-payment of the claims fees (Rule 45(3) EPC).

(54) Improved crane which can be mounted on a relative vehicle

(57) A crane (10) for lifting loads which can be mounted on a corresponding vehicle (11) having a longitudinal axis (L), in particular a truck, comprising a support base (12) of the crane mounted on the vehicle (11), from which extend vehicle stabilizing means comprising an extending arm (14) carrying the ground support means (16). The extending stabilizer arm (14) is fixed to the support base (12) and extends from the support base (12) oriented at an angle (A) with respect to the longitudinal direction (L) of the vehicle.

FIG. 1B



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Description

[0001] The present invention refers to a crane for lifting loads, which can can be mounted on a relative vehicle and in particular mounted on a truck.

[0002] In the field of truck-mounted lifting cranes, vehicle stabilizer means are known consisting of a first and a second telescopic stabilizer arms which extend outwards in front of the driver's cab of the truck in order to stabilize the front part of the truck during lifting operations. These first and second front stabilizer arms of the lorry extend outwards on opposite sides of a support base supporting the lifting boom of the crane and consist of arms which extend, retract and rotate, thanks to actuating means, with respect to the support base and which, in their rest position, are longitudinally aligned with the vehicle driver's cab, in particular, alongside the support base of the lifting boom.

[0003] This stabilizing system with rotating telescopic arms is used in combination with a load lifting boom which also extends in its rest position lengthways to the vehicle to the rear of the driver's cab. This type of truck or truck-mounted crane is designed for lifting only and the body or flat bed to the rear of the driver's cab can only be used for stowing the lifting boom in its rest position and for no other purposes. Furthermore, this type of crane uses an excessive number of actuators for operating the stabilizing elements.

[0004] Similar stabilizing means are used to stabilize the rear part of the truck.

[0005] Another known solution involves the use of a lifting boom which in its folded rest position is located crossways with respect to the cab so that other loads can be carried to the rear of the cab on the truck bodywork.

[0006] In this case, in order to obtain a conveniently long crane outreach, rotary telescopic arms to the front of the cab are not used as stabilizers because in this case they are provided with stabilizer jacks which are fixed to the front of the truck driver's cab directly to the truck support structure in such a way that the structure underneath the driver's cab requires structural stiffening so that the stabilizer jacks can be conveniently anchored to the load bearing structure of the truck.

[0007] It is provided a crane for lifting loads mounted on a relative vehicle with a longitudinal axis and in particular a truck comprising a support base for the crane mounted on the vehicle from which vehicle stabilizing means extend where said means comprise an extending arm carrying support means resting on the ground, characterised in that the extending stabilizer arm is fixed to the support base and extends outwards from the support base in a direction at an angle to the longitudinal direction.

[0008] In this way it is provided a convenient stabilization of the vehicle on which the crane is mounted without incurring the excessive manufacturing costs characteristic of the known solutions where an excessive number of actuators are required and modifications have to be made to the load bearing structure of the vehicle.

[0009] These features and further ones of the crane according to the present invention.

[0010] Further features and advantages of the invention will become apparent from the description of an embodiment which follows with reference to the annexed drawings, given purely by way of a nonlimiting example, in which:

- Figure 1A shows a side view of a truck mounted with a preferred embodiment of a lifting crane according to the present invention;
- Figure 1B shows a perspective view from the rear of a truck mounted with a preferred embodiment of a lifting crane according to the present invention;
- Figure 2 shows a perspective view from the front side of a preferred embodiment of a lifting crane according to the present invention, with the lifting boom in the rest position;
- Figure 3 shows a perspective view from the rear side of a preferred embodiment of a lifting crane according to the present invention;
- Figure 4 shows a side view of a preferred embodiment of a lifting crane according to the present invention;
- Figure 5 shows a rear view of a preferred embodiment of a lifting crane according to the present invention;
- Figure 6 shows a plan view from above of a preferred embodiment of a lifting crane according to the present invention;
- Figure 7A shows a plan view from above of the support base and the stabilizer sections in the extended position of a lifting crane according to the present invention and mounted on a relative truck;
- Figure 7B shows a plan view from above similar to that in Figure 7A, with details of the support base structure of a preferred embodiment of a lifting crane according to the present invention;
- Figure 8A shows a perspective view of a motor vehicle mounted with a preferred embodiment of a lifting crane, with details of the support base with the stabilizer arms in the extended position;
- Figure 8B shows a perspective view seen from a slightly different angle compared with Figure 8A of the support base and the stabilizer extensions of a preferred embodiment of a lifting crane according to the present invention;
- Figure 9 shows a rear view with the stabilizer arms in their extended position and shows the support base only and the stabilizer arms of a preferred embodiment of a crane according to the present invention.

[0011] The figures show a preferred embodiment 10 of a load lifting crane, in particular a telescopic boom crane, which is mounted on a vehicle 11 comprising a truck with, as shown in the figures, a driver's cab 11a and a flat bed 11b, partly illustrated in the enclosed figures.

[0012] The present crane 10 is mounted close to the rear of the driver's cab 11a and could also be mounted on the truck on the rear end of the flat bed 11b.

[0013] The present crane 10 comprises, as described more fully below, a lifting boom 13 of a folding type which in its rest position extends crossways to the longitudinal axis "L" of the truck.

[0014] In particular, the lifting crane 13 has a main element 13a on which is jointed or folded a boom element 13b comprising a plurality of telescopic elements 13'b and 13c which can be extended and retracted by the action of the corresponding hydraulic cylinders 13d.

[0015] In particular, as shown in the figures, the boom element 13b of the crane extends, in its rest position, lengthways alongside the main element 13a connected to the slewing rack of the crane.

[0016] The crane 10 comprises a support base 12, connected to the longitudinal support members 11', 11' of the vehicle 11, to which the lifting boom is connected by means of a corresponding slewing rack 15 which rotates around a vertical axis and from which the corresponding vehicle stabilizing means are extended when the crane is working.

[0017] These vehicle stabilizing means comprise a first extending arm, marked with the reference number 14, which carries the corresponding ground supports which in turn comprise a vertical jack cylinder 16 with a foot pad 16a.

[0018] In particular the support base 12 extends in a substantially linear direction along the longitudinal axis "L" of the vehicle and has a front face 12a, a back face 12b and opposing side or lateral faces 12c, 12d.

[0019] Advantageously, the extending stabilizer arm 14 can be connected, in a fixed manner, to the support base 12 and extends outwards from the support base 12 at an angle "A" with respect to the longitudinal direction "L" of the vehicle.

[0020] In this manner the invention provides an arm 14 which is solidly anchored to the support base 12 and is able to stabilise the vehicle in the area in front of the driver's cab 11a as illustrated in Figure 7A.

[0021] However, it should be understood that wherever the present crane is mounted in the rear position on the truck, that is, on the rear end of the flat bed 11b, the present stabilising means 14 must be able to rest on the ground lengthways beyond the rear end of the truck thereby making the truck more stable in this situation.

[0022] In practice, the stabilising arm 14 fixed to the support base 12, when fully extended, extends with its end 14' fitted with the ground support means alongside the respective side of the driver's cab 11a of the vehicle 11.

[0023] The angle of orientation with respect to the longitudinal axis "L" is marked in the figure with the reference letter "A" and is an angle of less than 90°, as shown in the Figures 7A and 7B.

[0024] Advantageously, as shown in the figures, the stabilizer arm 14 extends from the support base 12, starting from an intermediate zone of the respective side face 12c of the support base, in particular from a zone of the side face 12c of the support base 12, which is situated in the front part of the side face 12c.

[0025] Advantageously, the stabilizer arm 14 is part of the support base 12 structure and in particular of the intermediate zone of the support base 12.

[0026] In particular, the stabilizer arm 14 defines part of the structure of the support base 12 at or close to the zone of the crown wheel 15' of the slewing rack of the lifting crane 13.

[0027] As shown in the figures, the stabilizer arm 14 has a tail end 14', which extends outwards from the support base 12 at the side 12d which is opposite to the side 12c from which the arm 14 also extends. In particular, as shown in the figures, the tail end 14' of the stabilizer arm 14 extends from an intermediate and rear zone of the side face 12d of the support base 12.

[0028] As shown in the figures, the stabilizer arm 14 extends crossways and diagonally through the support base 12.

[0029] In this way the invention provides a stabilizer arm 14 which has a considerable length when fully extended and thereby provides effective vehicle stabilizing in the area in front of the vehicle.

[0030] Advantageously, the stabilizer arm 14 has a plurality of extension sections and, in particular, has an element 14a which is fixed to the support base 12 thus defining part of this structure, and one or more extension elements, and in particular a first and a second extension elements 14b and 14c which are connected in a mobile manner to the fixed element and to each other.

[0031] In practice, as the figures show, the fixed extension 14a receives coaxially inside its interior the first mobile extension 14b and the second mobile extension 14c which in turn is coaxially contained inside the second mobile extension 14b and which carries on its free end 14" the ground jack 16.

[0032] In particular, as shown in the figures, each of the elements 14a, 14b and 14c of the stabilizer arm 14 has a quadrangular cross-section and is longitudinally linear or straight.

[0033] Advantageously, as the figures show, the element 14a of the stabilizer arm 14, which is fixed to the support base 12, has a head end 14'a from which one or more of the extension sections of the arm 14 extend and where the head end 14'a of the fixed element 14a extends out of the support base 12 beyond the respective face 12c of the support base. As the figures show, the fixed element of the stabilizer arm 14 has a head end 14'a which extends from a respective side face 12c of the support base and in particular from the front part of the side face 12c.

[0034] Advantageously and as shown in the figures, the fixed element 14a of the stabilizer means 14 has a tail end 14' which extends from the side 12d of the base 12 which is opposite to the side 12c from which the stabilizer arm 14 extends.

[0035] The fixed element 14a of the stabilizer arm 14 has, advantageously, a height which is substantially the same as the height of the support base 12.

[0036] In particular, the fixed element 14a of the stabilizer means 14 defines part of the structure of the support base 12 and extends diagonally to this and, in particular, diagonally to the longitudinal axis "L".

[0037] Furthermore and as illustrated in Figures 7A and 7B, the fixed element 14a of the stabilizer means 14 extends from the fixing zone 15' for the rack of the lifting boom 13 but remains under this and in particular remains under the rear zone 15" of this one.

[0038] Advantageously and as illustrated, the fixed element 14a has a tail end 14' which extends out of the support base at the intermediate zone of the side face 12d of the support base and in particular at the zone to the rear of the side face 12d of the support base 12.

[0039] As illustrated, the fixed element 14a of the stabilizer arm 14 has a tail section 14' which is positioned in a longitudinal direction to the rear of the tail end 14'a of the same fixed element 14.

[0040] Advantageously, and as illustrated in particular in Figures 1B, 2 and 3, the crane 12 has a lifting boom 13 which in its rest position has an end 13', in particular defined by the corresponding end of the boom element 13b which extends below and alongside the support base 12.

[0041] In particular, the end 13' of the support boom in its folded state extends alongside the side face 12c of the support base 12.

[0042] In particular and as shown in the figures, the lifting boom 13 in its rest position has a lower end 13' which is located close to the extension zone of the stabilizer arm 14.

[0043] In practice and as illustrated, the stabilizer arm 14 has a fixed element 14a which extends below the lifting boom 13 in the crossways rest position, in particular below the main part 13a of the lifting boom, while the boom part 13b is vertically positioned to the side of the part 14'a of the stabilizer fixed element 14a.

[0044] In particular and as illustrated, the stabilizer arm 14 has an end 14'a from which the mobile elements 14b, 14c extend and extend below a corresponding end 13'a of the main fixing element 13b of the lifting boom 13 in the crossways rest position.

[0045] In particular, the end 14'a of the stabilizer arm 14 is, as can be seen in the figures, vertically aligned or substantially aligned to this end 13'a of the element 13b of the crane 13 in its folded rest position.

[0046] Furthermore and as illustrated, the rear part 13" of the lifting boom 13 in its rest position is also located above the tail end 14' of the fixed element of the stabilizer arm 14. In particular, the tail end 14' of the fixed element is vertically aligned or substantially aligned to the rear end of the telescopic or lifting part 13b of the lifting boom. As illustrated, the support base 12 has on its side face 12c a recessed portion defined by a surface inclined at an angle to the vertical where this recess defines a seat or zone for the end 13' of the lifting boom 13 in its rest position. This recess is marked with the reference number 17 in the enclosed figures and the inclined surface, delimited by the recess, is marked with the reference number 17a. This arrangement makes it possible to obtain a lifting boom with a particularly long outreach.

[0047] As illustrated, the section 14a of the fixed element of the stabilizer arm 14 projects from the support base 12 immediately to the side of the recess 17 and extends along the inside of the base 12 to the rear of the inclined surface 17a, in other words, in a position immediately to the rear of the seat 17 for housing the corresponding end 13' of the lifting boom in its rest condition.

[0048] As illustrated, to the rear of the recess 17, the side face 12c of the base 12 has a rear portion 12'c which is longitudinally aligned to the portion 12"c which is in front of the recess 17.

[0049] As illustrated, from the side 12d, opposite to side 12c, which is the extension of the diagonal stabilizing arm 14, there extends a second stabilizing arm marked with the reference number 18 advantageously in the form of an extending arm comprising a plurality of elements and, in particular, a base or main element 18a which is connected rotationally to the support base 12 by means of a vertical pin 20 so as to permit the rotating stabilizer arm to rotate from a stabilizing position angled with respect to the longitudinal axis "L" extending forwards alongside the driver's cab 11a and a retracted, rest position where the arm 18a is located to the side of the base 12 positioned in a longitudinal direction as indicated in particular in Figures 3 to 5.

[0050] In this retracted position, the rotating stabilizer arm 18, as shown in Figure 3, has its rear end 18'a of the main element on the extension and alongside the tail portion 14' of the fixed element 14a of the first stabilizer arm 14.

[0051] In practice and as illustrated, the rotating arm pivots on a front and side end of the support base 12 and has second and third extending sections 18b and 18c and where the latter has at its free end means for resting on the ground comprising a vertical jack cylinder 22 fitted with foot pad 24 resting on the ground.

[0052] The rotating arm 18 in its extended working position extends to the side of the driver's cab 11a of the vehicle side opposite to the side on which the fixed arm 14 extends and is oriented at an angle B with respect to the longitudinal axis of the vehicle.

[0053] The extended working position is reached by rotating the arm 18 forwards, starting from a position where the extension sections are retracted as shown in figures 2 to 5 and where the arm is located substantially lengthways alongside the support base.

[0054] As shown in the figures, the angle B between the stabilizer arm 18 in its work position and in its longitudinal position is an angle of less than 90°. It is clear in particular from Figure 7A that it is provided a lifting crane with a considerable outreach or extension of the lifting boom and at the same time provides optimum vehicle

stability also in the area to the front of the vehicle.

[0055] As it is clearly shown, in particular in Figure 6 and in Figure 5, the end 18'a of the main extension element of the second stabilizing arm 18 is located, in its rest position, below the rear portion or end 13" of the lifting boom 13 and in particular below the end 13" of the telescopic element 13c of the lifting boom 13.

[0056] As the figures show, the rotating stabilizer arm 18 comprises a plurality of extensions coaxially contained one inside the other. In particular, the extension 18c is contained inside the extension 18b which in turn is contained inside the jointed extension 18a; the extensions or elements of the stabilizer arm 18 have a matching quadrangular section and extend in a straight line.

[0057] It must be understood that the location of a diagonal fixed arm on one side of the support base and the location of a rotating stabilizer arm on the other side of the support base, irrespective of the side of the support base actually used, is possible according to the present and advantageous lifting crane.

[0058] Obviously, in a layout where the support base is in a position to the rear of the crane truck, the rotating extension 18 can be extended longitudinally beyond the rear edge of the crane truck thus advantageously providing stabilising in this area.

[0059] The support base 12 has the form of a box section body comprising first and second profiles 121 and 122, of a rectangular cross-section, which extend forward to the base element 12a of the diagonal stabilizer 12, extending longitudinally and parallel to each other but having different lengths.

[0060] The front profiles 121, 122 of the box section body 12 have front projecting ends 121', 122' and extend until they reach the corresponding side wall of the fixed profile 14a of the diagonal stabilizer 14.

[0061] The support base 12 further comprises first and second rectangular section profiles 123, 124, which extend to the rear of the base element 12a of the diagonal stabilizer 12 and which also extend longitudinally and parallel to each other on the extension of the front profiles 121, 122 and which are also of different lengths.

[0062] The rear profiles 123, 124 of the box section body 12 each have projecting front ends 123', 124' and also extend until they reach the corresponding side wall of the fixed profile 14a of the diagonal stabilizer 14.

[0063] The base box section body 12 has an upper plate 125 which is applied above the upper wall of the profiles 121, 122, 123, 124 and which has a suitably shaped profile and a lower plate 126 which has a central portion 126a which extends between the lower walls of the profiles 121, 122, 123, 124 and a side portion 126b extending outside the same lower walls of the profiles 122 and 124.

[0064] The side wall 12a of the base 12 coincides with the corresponding side wall of the profiles 121 and 123.

[0065] The outer parts of the box section body 12 comprise a front vertical wall 12a, a rear vertical wall 12b and counter-opposing side walls 12c, 12d where the side wall 12a has a recess 17 for housing the corresponding end 13' of the lifting boom in its rest position and where the side wall 12d has a longitudinal profile or design which is recessed at the rear part of the same wall and where the tail end 14' of the diagonal stabilizer arm extends beyond the rear part 12"d of the wall 12d and terminates in a position which is substantially aligned with the front part 12'd as shown in Figure 3.

[0066] In practice, the front part 12'd of the side wall 12d is situated laterally to the outside of the rear part 12"d of the same wall 12 to which it is connected by a curved radius section 12e.

[0067] The rear profiles 123, 124 can be fixed to corresponding, aligned longitudinal support members for the rear stabilizers which are not shown in the enclosed figures.

[0068] The joint pin 20 of the second stabilizer arm 18 is supported by two horizontal plates 127, 129 projecting sideways from the part 12d of the wall 121 at the front edge of the base 12.

[0069] A section of quadrangular, tubular profile 128 supports the hinge plate 127 in a position which is raised with respect to the upper surface 125 of the base 12.

[0070] It is provided a support base structure which is strong and enables the optimum fitting of the components supported in compact overall dimensions. The present invention provides a crane structure which provides considerable stability for the vehicle mounting the crane. It enables optimum use to be made of the space available on the vehicle for loading other elements. It also enables a relatively long outreach for the lifting boom.

[0071] The invention described is susceptible to industrial application and may be modified and adapted in several ways without thereby departing from the scope of the inventive concept. Moreover, all the details of the invention may be substituted by technically equivalent elements.

Claims

1. Crane (10) for lifting loads which can be mounted on a corresponding vehicle (11) having a longitudinal axis (L), in particular a truck, comprising a support base (12) of the crane mounted on the vehicle (11), from which extend vehicle stabilizing means comprising an extending arm (14) carrying the ground support means (16), **characterised in that** the extending stabilizer arm (14) is fixed to the support base (12) and extends from the support base (12) oriented at an angle (A) with respect to the longitudinal direction (L).

2. Crane according to claim 1 or according to the preamble to claim 1, **characterised in that** the stabilizer arm (14) fixed to the support base (12) extends from the support base (12) alongside the driver's cab (11b) of the vehicle.

3. Crane according to any of the foregoing claims or according to the preamble to claim 1, **characterised in that** the stabilizer arm (14) extends from a side face (12c) of the support base (12).

4. Crane according to claim 3, **characterised in that** the stabilizer arm (14) extends from an intermediate zone of the respective side face (12c) of the support base (12).

5. Crane according to any of the foregoing claims 3 and 4, **characterised in that** the stabilizer arm (14) extends in a zone in front of the respective side face (12c) of the support base (12).

6. Crane according to any of the foregoing claims or according to the preamble to claim 1, **characterised in that** the stabilizer arm (14) has a fixed element (14a) fixed to the support base (12) and one or more (14b, 14c) extension elements connected in a mobile manner to the fixed element.

7. Crane according to claim 6, **characterised in that** the fixed element (14a) fixed to the support base (12) has a head end (14'a) from which one or more of the extension elements (14b, 14c) extend out of the support base (12).

8. Crane according to any of the foregoing claims 6 and 7, **characterised in that** the fixed element (14a) has a head end (14'a) which extends from the respective side face (12c) of the support base (12).

9. Crane according to claim 8, **characterised in that** the fixed element (14a) has a head end (14'a) which extends from an intermediate zone of the respective side face of the support base (12).

10. Crane according to any of the foregoing claims or according to the preamble to claim 1, **characterised in that** the crane has a lifting boom (13) which, in its rest position, has an end (13') which extends alongside the support base (12).

11. Crane according to any of the foregoing claims or according to the preamble to claim 1, **characterised in that** the crane has a lifting boom (13) which, in its rest position, has a corresponding end (13'a) of the main base fixing element (13a) which extends above a respective end (14'a) of the stabilizer arm (14).

12. Crane according to claim 11, **characterised in that** the end (14'a) of the stabilizer arm (14) is vertically aligned or substantially aligned to the end (13'a) of the main element (13a) attaching the base to the lifting boom (13).

13. Crane according to any of the foregoing claims from 10 to 12, **characterised in that** the stabilizer arm (14) extends from the support base (12) at the side of the positioning zone of a corresponding end (13'a) of the crane lifting boom.

14. Crane according to any of the foregoing claims from 10 to 13, **characterised in that** the support base (12) has a recess (17) for positioning the corresponding end (13') of the lifting boom of the crane.

15. Crane according to claim 14, **characterised in that** the recess is defined by an inclined surface (17a) where the lower end of the lifting boom is positioned in its rest condition.

16. Crane according to any of the foregoing claims from 10 to 15, **characterised in that** the stabilizer arm (14) extends into the base (12), to the rear of the recess (17).

17. Crane according to any of the foregoing claims or according to the preamble to claim 1, **characterised in that** the stabilizer arm (14) has a tail end (14') which extends to the outside of the support base (12).

18. Crane according to claim 17, **characterised in that** the stabilizing arm (14) has a tail end (14') which extends from an intermediate zone of the side face (12d) of the support base (12).

19. Crane according to any of the foregoing claims 17 and 18, **characterised in that** the stabilizer arm (14) has a tail end (14') which extends from a zone to the rear of the side face (12d) of the support base (12).

20. Crane according to any of the foregoing claims from 9 to 19, **characterised in that** the fixed element (14a) has a head end (14'a) which extends from a zone to the front of the respective side face (12c) of the support base (12).

21. Crane according to any of the foregoing claims from 6 to 20, **characterised in that** the fixed element (14a) has a tail end (14') which extends from a side (12d) of the support base (12) which is opposite to the side on which the stabilizer arm (14) extends.

22. Crane according to any of the foregoing claims or according to the preamble to claim 1, **characterised in that** the stabilizer arm (14) defines part of the structure of the support base (12).

23. Crane according to claim 22, **characterised in that** the stabilizer arm (14) defines part of the structure of the intermediate zone of the support base (12).

24. Crane according to any of the foregoing claims 22 and 23, **characterised in that** the stabilizing arm

(14) defines part of the support structure (12) at the fixing zone (15') of the slewing rack (15) of the lifting boom (13) .

25. Crane according to any of the foregoing claims or according to the preamble to claim 1, **characterised in that** the stabilizer arm (14) extends crossways through the support base (12).

26. Crane according to any of the foregoing claims or according to the preamble to claim 1, **characterised in that** the stabilizer arm (14) extends diagonally to the support base (12).

27. Crane according to any of the foregoing claims from 6 to 26, **characterised in that** the fixed element (14a) has a height which is substantially the same as the height of the support base (12).

28. Crane according to any of the foregoing claims, **characterised in that** the stabilizer arm (14) has a first, a second and a third elements (14a, 14b, 14c) coaxial one to another.

29. Crane according to any of the foregoing claims from 15 to 28, **characterised in that** the recessed inclined surface (17a) extends from the side part (12c) of the base (12).

30. Crane according to any of the foregoing claims from 15 to 29, **characterised in that** the recessed surface (17a) extends at an angle to the side wall (12c) and/or the upper surface (125) of the base 12.

31. Crane according to any of the foregoing claims or according to the preamble to claim 1, **characterised in that** the stabilizer arm (18) has the form of a rotating arm which rotates with respect to the support base (12).

32. Crane according to any of the foregoing claims, **characterised in that** the stabilizer arm (18) extends from the opposite side (12d) of the support base (12) with respect to the first stabilizer arm (14).

33. Crane according to any of the foregoing claims from 31 to 32, **characterised in that** the stabilizer arm (18) extends from a front end (12a) of the support base (12).

34. Crane according to any of the foregoing claims from 31 to 33, **characterised in that** the stabilizer arm (18) extends from a side edge (12d) of the support base (12).

35. Crane according to any of the foregoing claims from 31 to 34, **characterised in that** the stabilizer arm (18) in its rest position is located alongside the support base (12).

36. Crane according to any of the foregoing claims from 31 to 35, **characterised in that** the stabilizer arm (18) in its rest position is located alongside the tail end (14') of the inclined stabilizer arm (14).

37. Crane according to any of the foregoing claims from 31 to 36, **characterised in that** the stabilizer arm (18) in its rest position is located under the lifting boom (13).

38. Crane according to any of the foregoing claims, **characterised in that** the respective element of the stabilizer arm (14, 18) extend in a straight line.

39. Crane according to any of the foregoing claims, **characterised in that** the respective element of the stabilizer arm (14, 18) has a quadrangular cross-section.

40. Crane according to any of the foregoing claims or according to the preamble to claim 1, **characterised in that** the support base (12) has the form of a box section body.

41. Crane according to any of the foregoing claims or according to the preamble to claim 1, **characterised in that** the support base (12) has a first and a second profiles (121, 122) which extend to the front of the base element (12a) of the diagonal stabilizer (12).

42. Crane according to claim 41, **characterised in that** the first and the second profiles (121, 122) which extend to the front of the base element (12a) of the diagonal stabilizer (12) have different lengths.

43. Crane according to any of the foregoing claims or according to the preamble to claim 1, **characterised in that** the support base (12) has a first and a second profiles (123, 124) which extend to the rear of the base element (12a) of the diagonal stabilizer (12).

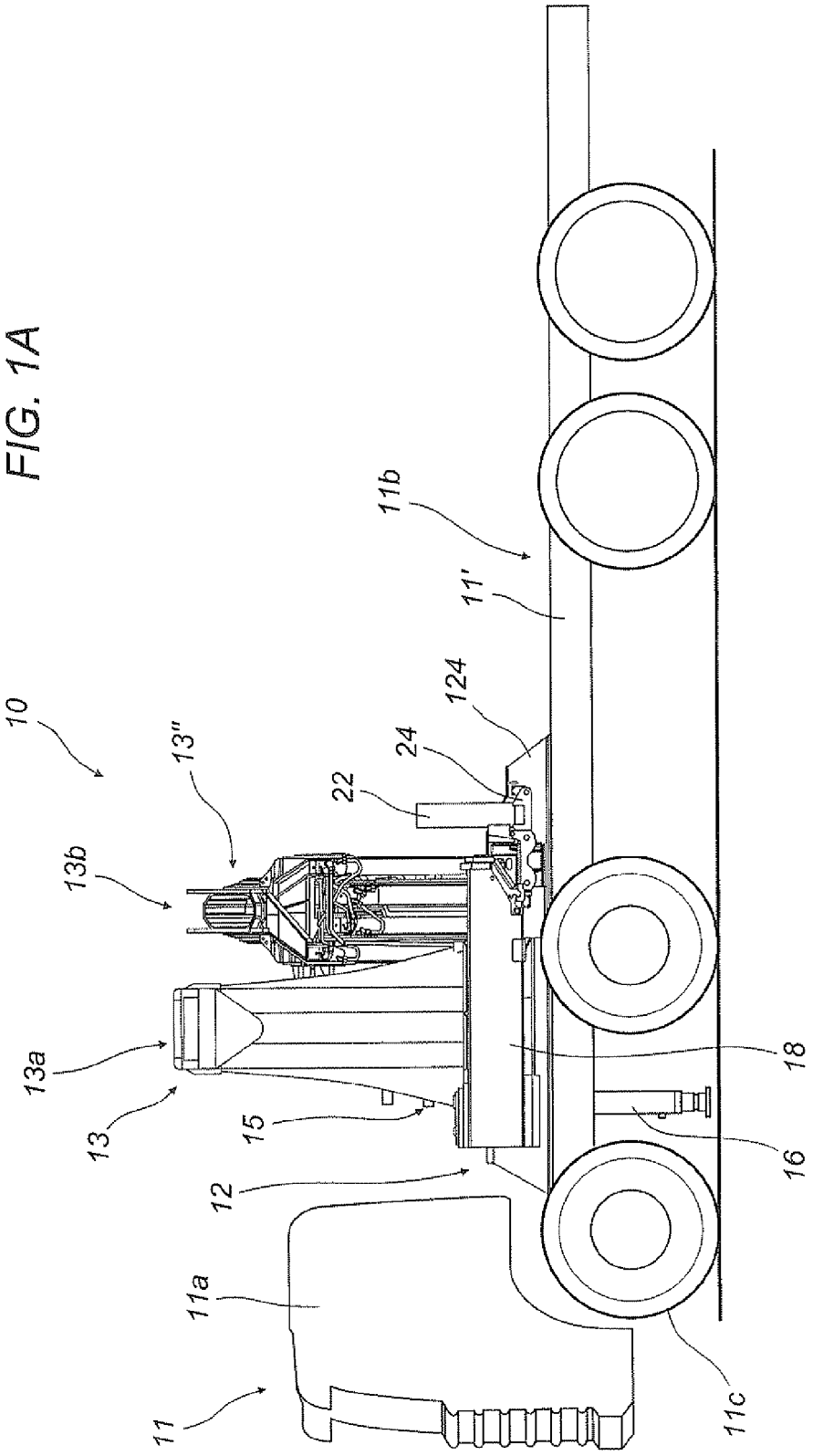
44. Crane according to claim 43, **characterised in that** the first and the second profiles (123, 124) which extend to the rear of the base element (12a) of the diagonal stabilizer (12) have different lengths.

45. Crane according to any of the foregoing claims or according to the preamble to claim 1, **characterised in that** the support base (12) has a face wall (12d) with a recessed part (12"d).

46. Crane according to any of the foregoing claims or according to the preamble to claim 1, **characterised in that** the tail end (14') of the diagonal stabilizer arm (14) extends at a recessed zone (12"d) of the respective wall.

47. Truck crane comprising a support frame for a crane, **characterised in that** it comprises a crane according to any of the foregoing claims.

FIG. 1A



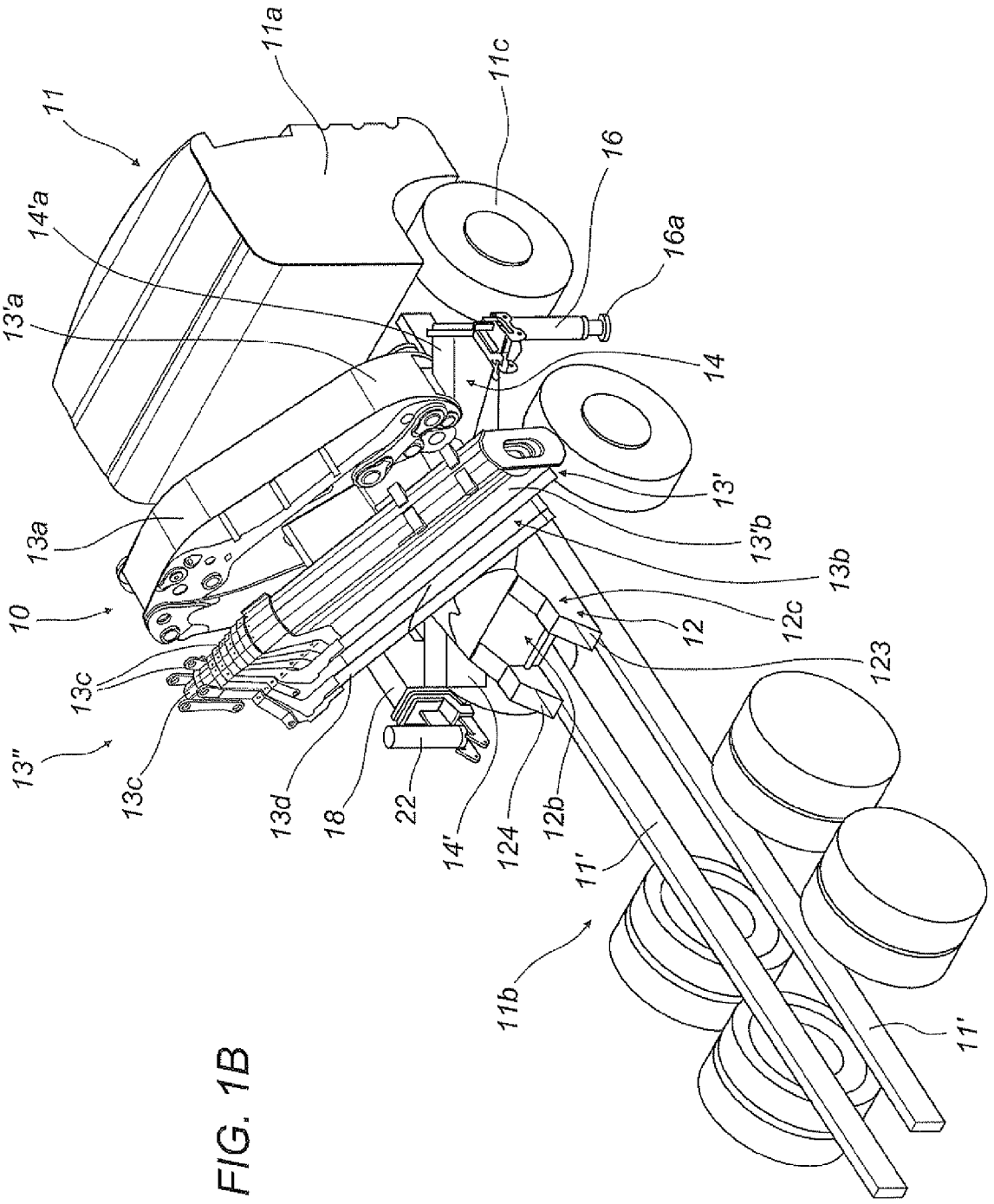

11
11a
11c
16
16a
14'a
13'a
14
13'
13"b
13b
12c
12
123
13a
10
13c
13"
13c
13d
18
22
14'
124
12b
11'
11b
11'

FIG. 1B

FIG. 3

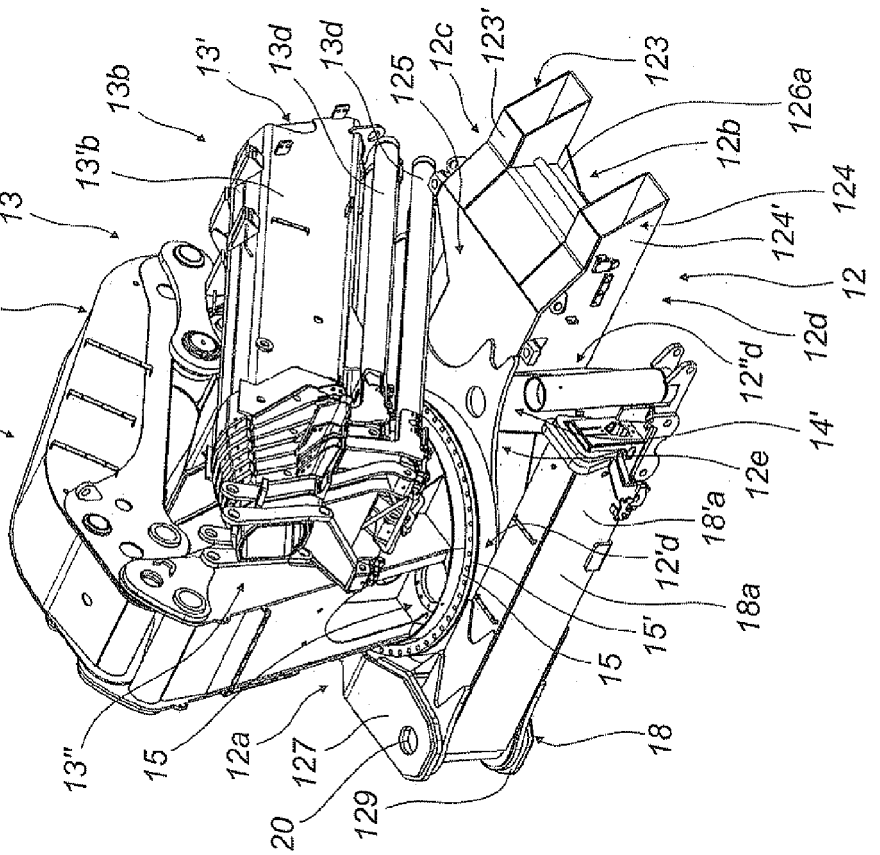

10
13a
13
13'b
13b
13'
13d
13d
125
12c
123'
123
126a
12b
124
124'
12
12d
12"d
14'
12e
18'a
12'd
15'
15
18a
18
13"
15
12a
127
20
129

FIG. 2

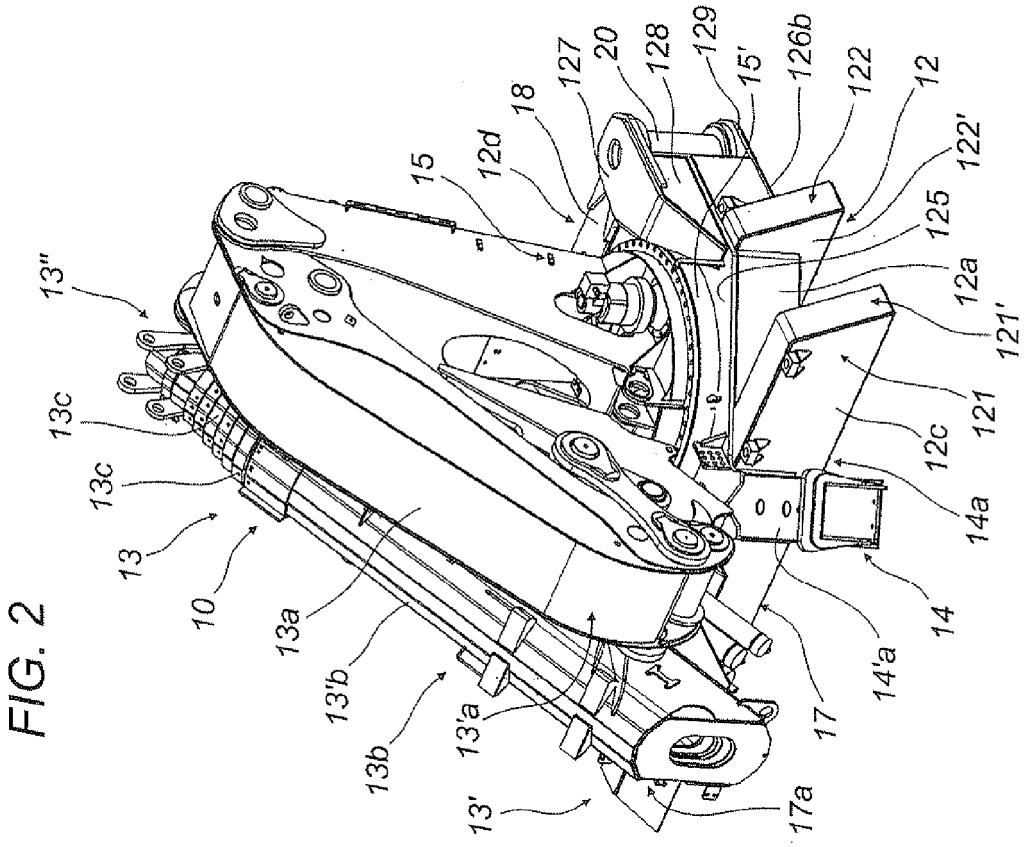

13"
13c
13c
13
10
13a
13'b
13b
13'
13'a
17a
17
14'a
14
14a
12c
121
121'
12a
125
122'
12
122
126b
15'
129
128
20
127
18
12d
15

FIG. 5

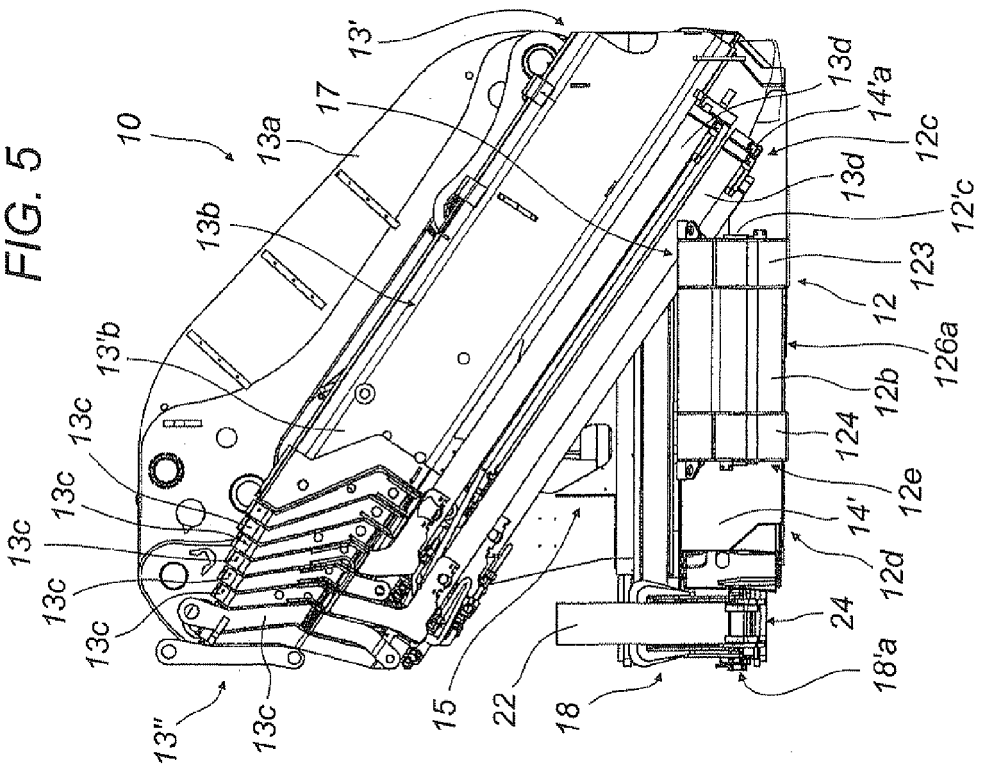

13'
10
13a
17
13b
13'b
13c
13c
13c
13c
13c
13''
13c
15
22
18
13d
14'a
12c
13d
12'c
123
12
126a
12b
124
12e
14'
12d
24
18'a

FIG. 4

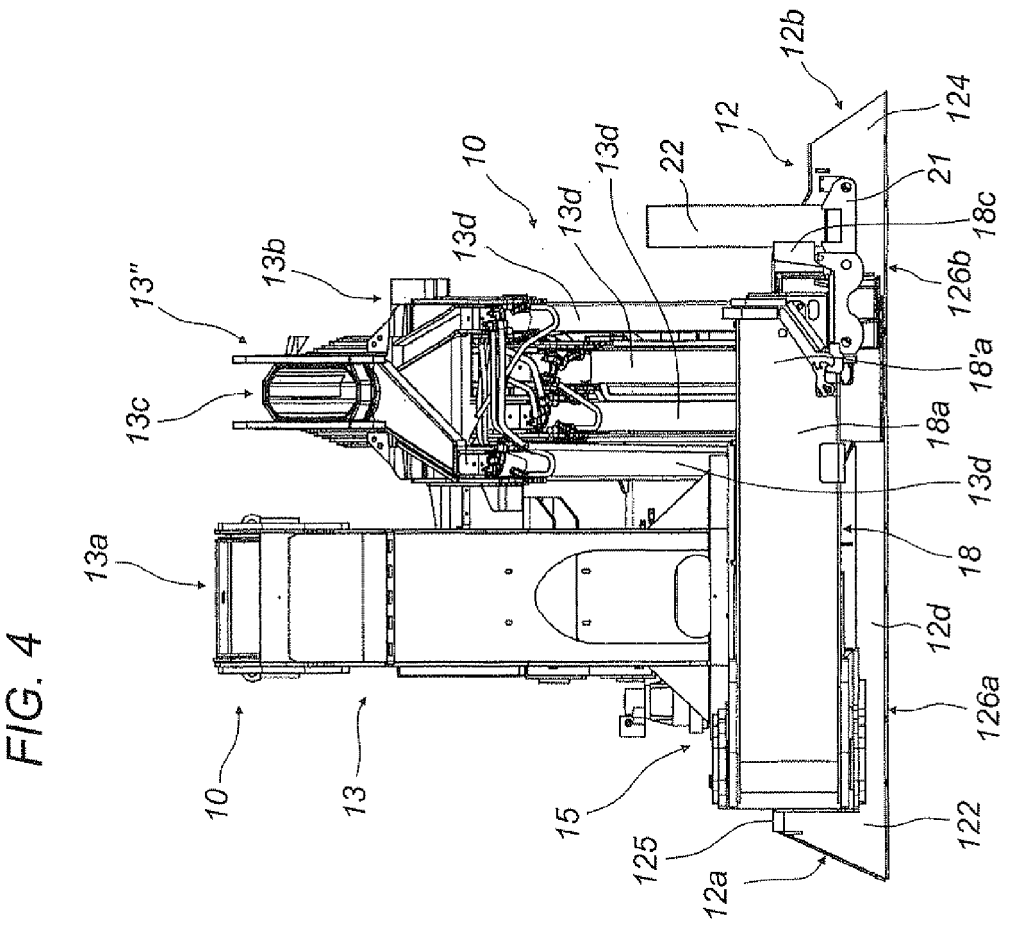
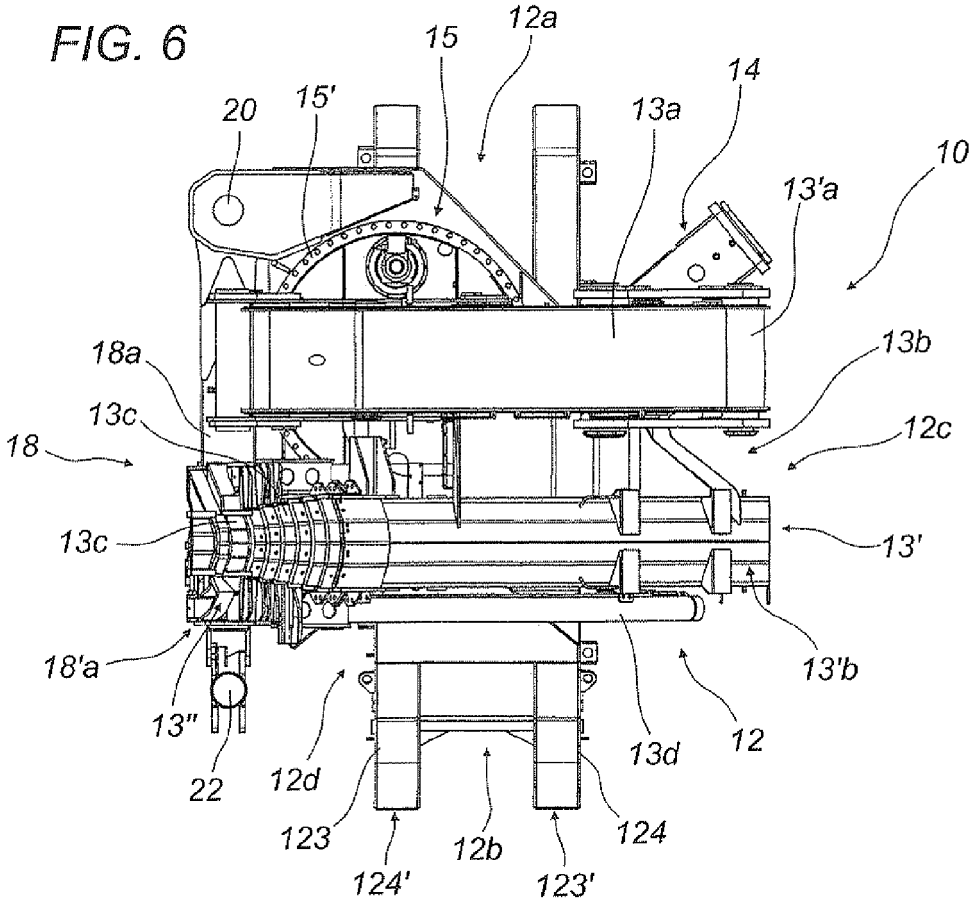

12b
124
12
22
13d
10
13d
13d
21
18c
126b
13''
13b
18'a
13c
18a
13d
13a
18
12d
126a
10
13
15
125
12a
122

FIG. 6


15
12a
14
20
15'
13a
10
13'a
18a
13b
13c
12c
18
13c
13'
18'a
13'b
13"
13d
12
22
12d
123
12b
124
124'
123'

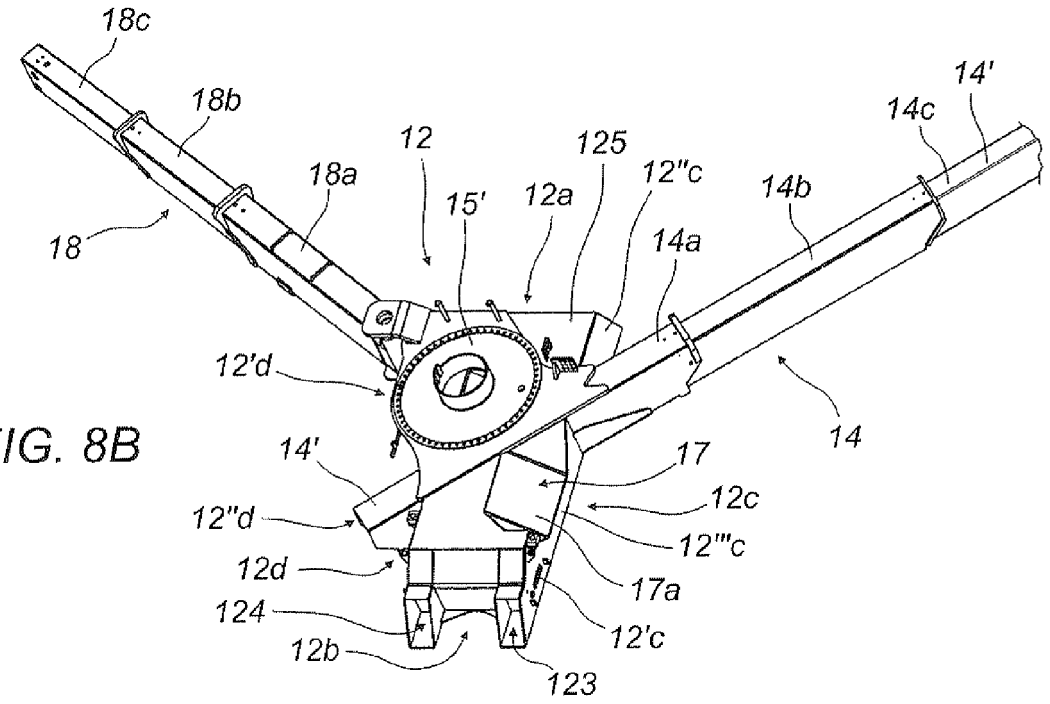
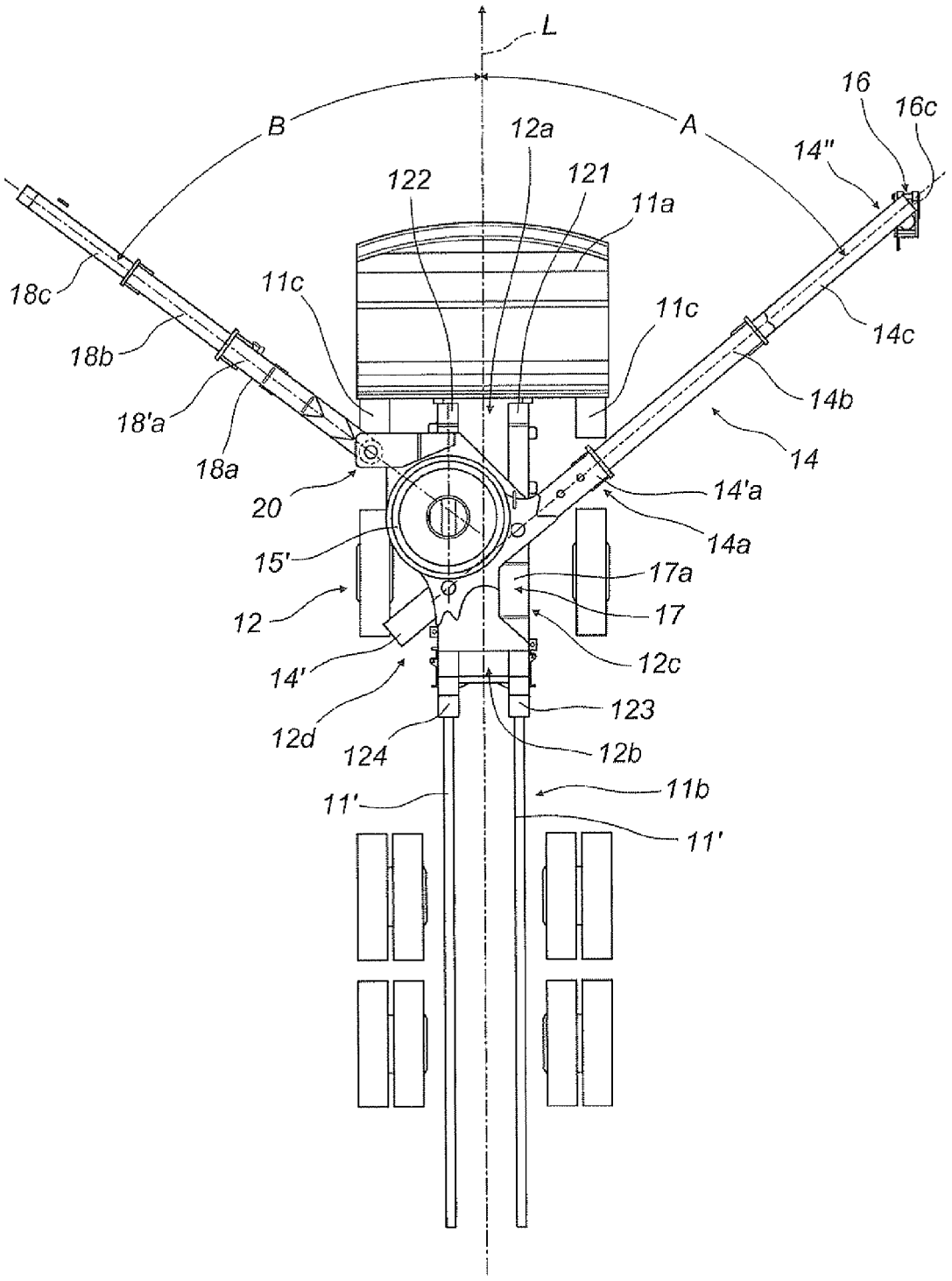

18c
18b
14'
14c
12
125
12"c
18a
15'
12a
14b
18
14a
12'd
14
14'
17
12c
12"d
12'"c
12d
17a
124
12'c
12b
123

FIG. 8B

FIG. 7A


L
B
A
12a
16
16c
14"
122
121
11a
18c
11c
11c
14c
18b
14b
18'a
14
18a
20
14'a
14a
15'
17a
12
17
12c
14'
12d
124
123
12b
11b
11'
11'

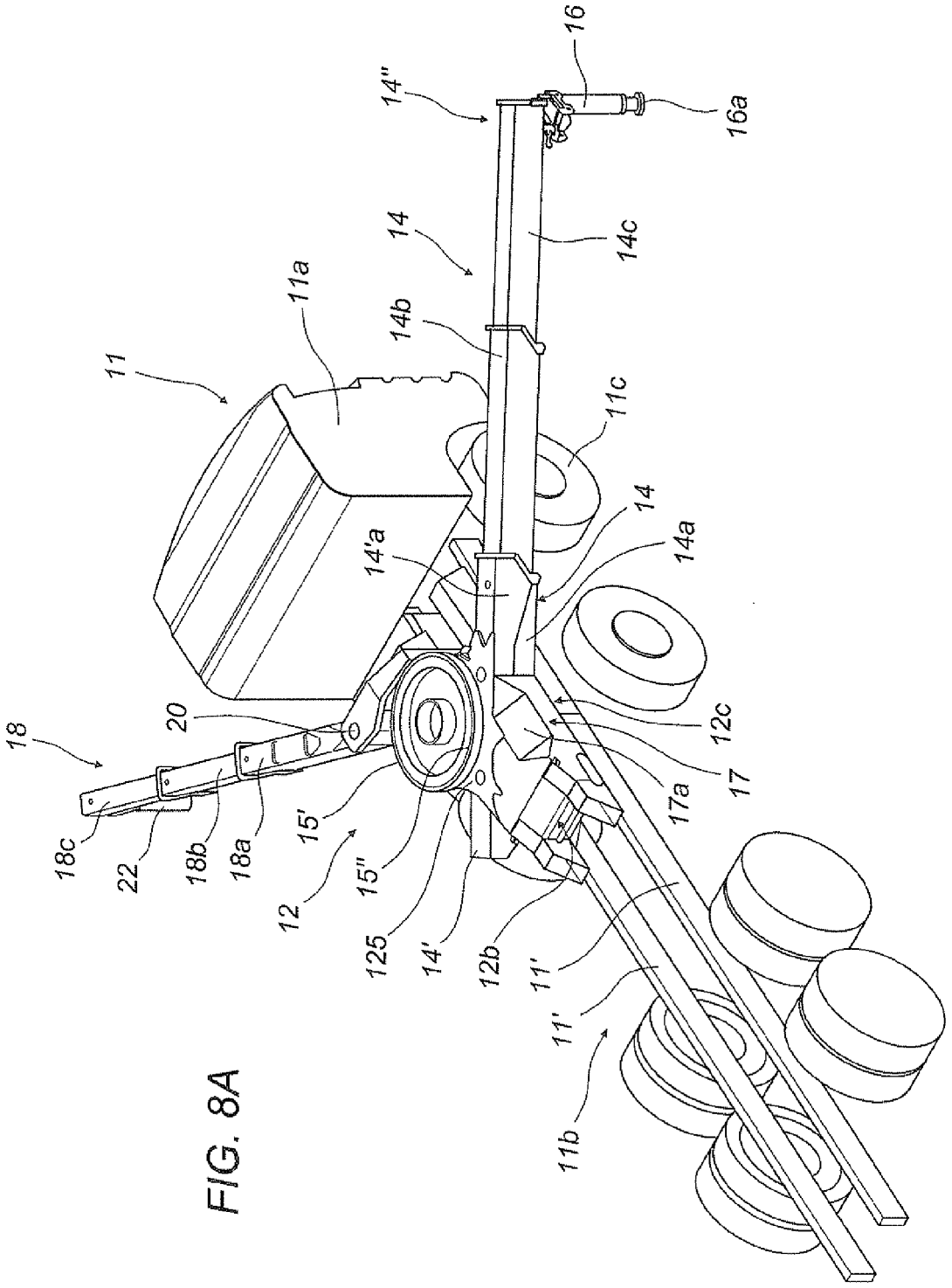

16
14''
16a
14
14c
11a
14b
11
11c
14
14a
14'a
18
20
12c
17
17a
18c
22
18b
18a
15'
15''
12
125
14'
12b
11'
11'
11b

FIG. 8A

FIG. 9

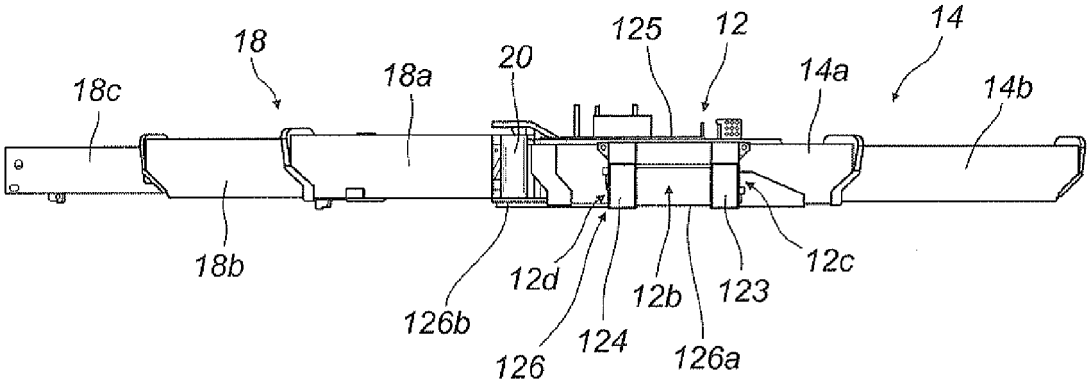
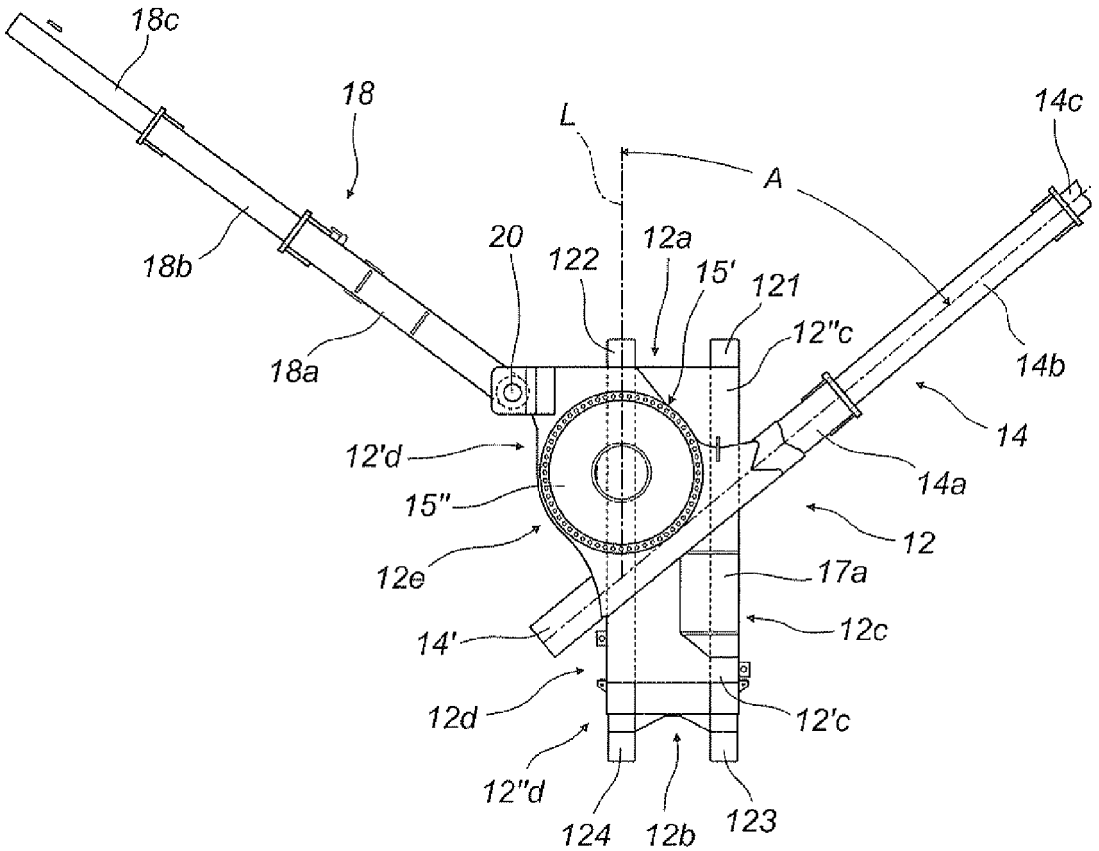

18
18c
18a
20
125
12
14
14a
14b
18b
126b
12d
126
124
12b
126a
123
12c

FIG. 7B


18c
18
L
A
14c
18b
20
122
12a
15'
121
12"c
14b
18a
14
12'd
14a
15"
12
12e
17a
14'
12c
12d
12'c
12"d
124
12b
123