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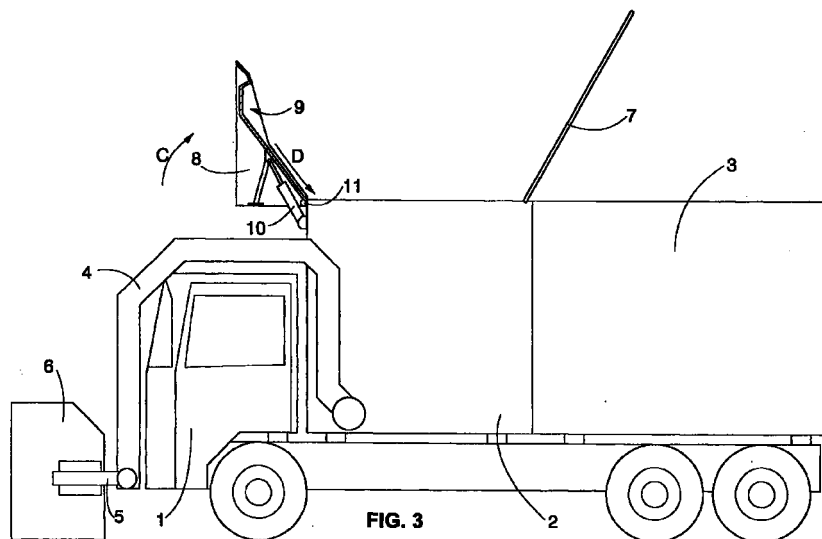
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(54) **Front-loadable garbage truck**

(57) A front-loadable garbage truck comprising a control cabin (1) arranged in the front part of the garbage truck, a waste press (2), a waste container (3), and means for emptying a refuse bin (6) from the front of the garbage truck over the control cabin (1) into the waste press (2). A roofing cover (8) is arranged above

the control cabin (1), the roofing cover (8) comprising a collecting nest (9) for collecting refuse and other impurities falling on the roofing cover (8). The garbage truck further comprises means for emptying the collecting nest (9) into the waste press (2).



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Description

[0001] The invention relates to a front-loadable garbage truck comprising a control cabin arranged in the front part of the garbage truck, a waste press, a waste container, means for emptying a refuse bin from the front of the garbage truck over the control cabin into the waste press, and a roofing cover arranged above the control cabin.

[0002] A front-loadable garbage truck usually comprises a waste press, a waste container and means for emptying a custom-built refuse bin from the front of the garbage truck over the control cabin into the waste press. The waste press presses refuse into the waste container so as to enable the waste container to accommodate as much refuse as possible. The waste container is emptied by dumping. The garbage truck is used for emptying refuse bins of varying sizes and structures. Since the refuse bins vary in size and dimension, some refuse bins are difficult to empty without any refuse, dirty water or other such impurities falling and dripping on the roofing cover of the control cabin from the refuse bin being emptied. In such a case, the control cabin and the vicinity of the garbage truck are fouled, which means that refuse must be collected from the ground and the control cabin, and the vicinity must also be cleaned. Consequently, the advantage otherwise achieved by the frontloadable garbage truck, in other words the fact that the garbage truck can be used by one person only who can sit in the control cabin of the garbage truck substantially all the time, will be lost.

[0003] An object of the present invention is to provide a garbage truck to enable the aforementioned drawbacks to be avoided.

[0004] A garbage truck of the invention is characterized in that the roofing cover comprises a collecting nest for collecting the refuse and other impurities falling on the roofing cover, and that the garbage truck comprises means for emptying the collecting nest into the waste press.

[0005] The idea underlying the invention is that the garbage truck comprises a control cabin arranged in its front part, a waste press, a waste container and means for emptying a refuse bin from the front of the garbage truck over the control cabin into the waste press. A further essential point is that a roofing cover is provided above the control cabin, a collecting nest being arranged in the roofing cover for collecting refuse and other impurities falling on the roofing cover, and that the garbage truck comprises means for emptying the collecting nest into the waste press. The idea of a preferred embodiment is that a rotatable pin is arranged in the roofing cover and the garbage truck comprises an operating member for turning the roofing cover to turn around the rotatable pin in order to empty the collecting nest. Most preferably, the rotatable pin is arranged in connection with an upper corner of the waste press.

[0006] An advantage of the invention is that refuse

and other impurities possibly falling from the refuse bin when being emptied can be collected on the roofing cover such that they do not foul and litter the control cabin nor the vicinity of the garbage truck, and they can be transferred into the waste press in a simple manner without the driver of the garbage truck being compelled to leave the control cabin. The collecting nest in the roofing cover can be emptied into the waste press simply and easily by arranging the operating member in the garbage truck to turn the roofing cover around the rotatable pin. The refuse on the roofing cover can be conveyed into the waste press in a simple and reliable manner by arranging the rotatable pin in connection with an upper corner of the waste press.

[0007] The invention will be described in closer detail in connection with the accompanying drawings, in which

Figure 1 is a schematic side view of a garbage truck of the invention,

Figure 2 is a side view of the garbage truck according to Figure 1 when a refuse bin is being emptied, and

Figure 3 is a side view of the garbage truck according to Figures 1 and 2 with a cross-section of a roofing cover when being emptied.

[0008] Figure 1 shows a front-loadable garbage truck comprising a control cabin 1 arranged in the front part of the garbage truck, a waste press 2 and a waste container 3. The control cabin 1, the waste press 2 and the waste container 3 are arranged on a chassis of a lorry truck, for example. The garbage truck further comprises a lift arm or lift arms 4, a lifting fork 5 being arranged at a head thereof, whereby the lifting fork 5 is arranged to lift a custom-built refuse bin 6.

[0009] Figure 2 shows how the refuse bin 6 is emptied from the front of the garbage truck over the control cabin 1 into the waste press 2. A closing cover 7 of the waste press 2 is opened, and the refuse bin 6 is lifted by turning the lift arms 4 to a position indicated in an unbroken line in Figure 2. Next, the lifting fork 5 is turned in a manner shown by arrow A such that the refuse bin 6 turns to a position indicated in a broken line in Figure 2, the refuse thus falling into the waste press 2. Next, the waste press 2 presses the refuse into the waste container 3. When the refuse bin 6 is being emptied, some of the refuse or dirty water or other such liquid or impurities possibly in the refuse bin 6 may fall from between the waste press 2 and the refuse bin 6 as shown by arrow B. A roofing cover 8 is arranged above the control cabin 1 of the garbage truck to receive the falling refuse and liquids. A collecting nest 9 is provided in the roofing cover 8, whereby the refuse and other impurities fallen on the roofing cover 8 do not fall off the roofing cover 8 to any substantial extent, but remain in the collecting nest 9. The fact that the roofing cover 8 is provided with the collecting nest 9 thus means that the roofing cover 8

has a construction to prevent refuse and other impurities falling on the roofing cover 8 from falling off the roofing cover 8 to any substantial extent.

[0010] Figure 3 shows a situation wherein the refuse bin 6 has already been emptied and put down to be replaced in its ordinary place. The roofing cover 8 is then turned by an operating member, preferably by a pneumatic cylinder 10, to turn around a rotatable pin 11 as shown by arrow C, in which case the refuse and other impurities in the collecting nest 9 of the roofing cover 8 flow into the waste press 2 as shown by arrow D. The most preferably, the rotatable pin 11 is arranged in connection with an upper corner of the waste press 2 as shown in the figure, in which case the roofing cover 8 can be emptied in a simple manner by turning the roofing cover 8 by the pneumatic cylinder 10. Figure 3 shows a cross-section of the roofing cover 8 so as to disclose the pneumatic cylinder 10 and the structure of the collecting nest 9.

[0011] The drawings and the related description are only intended to illustrate the idea of the invention. In its details, the invention may vary within the scope of the claims.

Claims

1. A front-loadable garbage truck comprising a control cabin (1) arranged in the front part of the garbage truck, a waste press (2), a waste container (3), means for emptying a refuse bin (6) from the front of the garbage truck over the control cabin (1) into the waste press (2), and a roofing cover (8) arranged above the control cabin (1), **characterized** in that the roofing cover (8) comprises a collecting nest (9) for collecting refuse and other impurities falling on the roofing cover (8), and that the garbage truck comprises means for emptying the collecting nest (9) into the waste press (2).
2. A garbage truck as claimed in claim 1, **characterized** in that a rotatable pin (11) is arranged in the roofing cover (8) around which rotatable pin (11) the roofing cover (8) is arranged to turn, and that the garbage truck comprises an operating member for turning the roofing cover (8) to turn around the rotatable pin (11) in order to empty the collecting nest (9).
3. A garbage truck as claimed in claim 2, **characterized** in that the rotatable pin (11) is arranged in connection with an upper corner of the waste press (2).
4. A garbage truck as claimed in claim 2 or 3, **characterized** in that the operating member for turning the roofing cover (8) is a pneumatic cylinder (10).

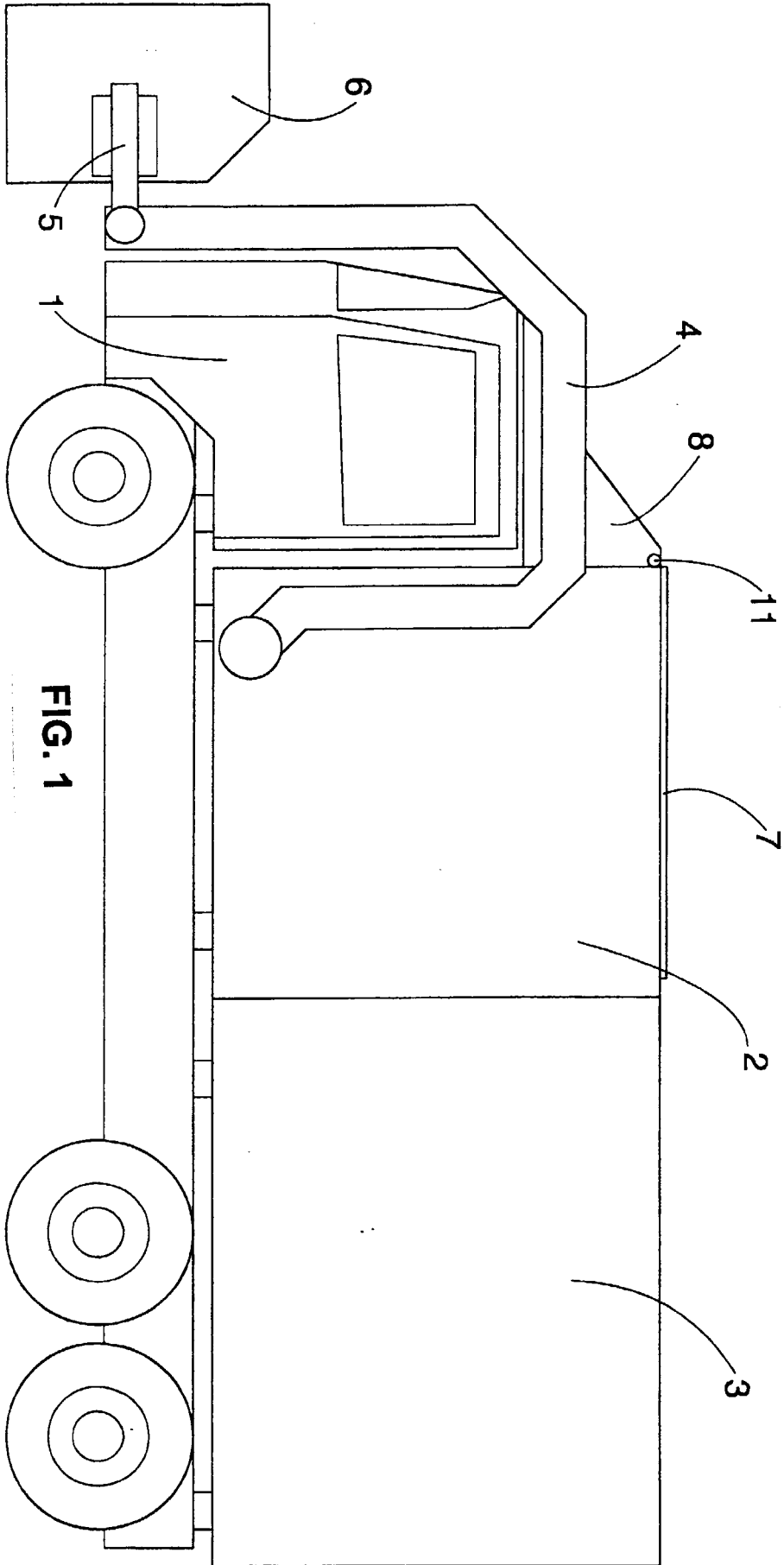


FIG. 1

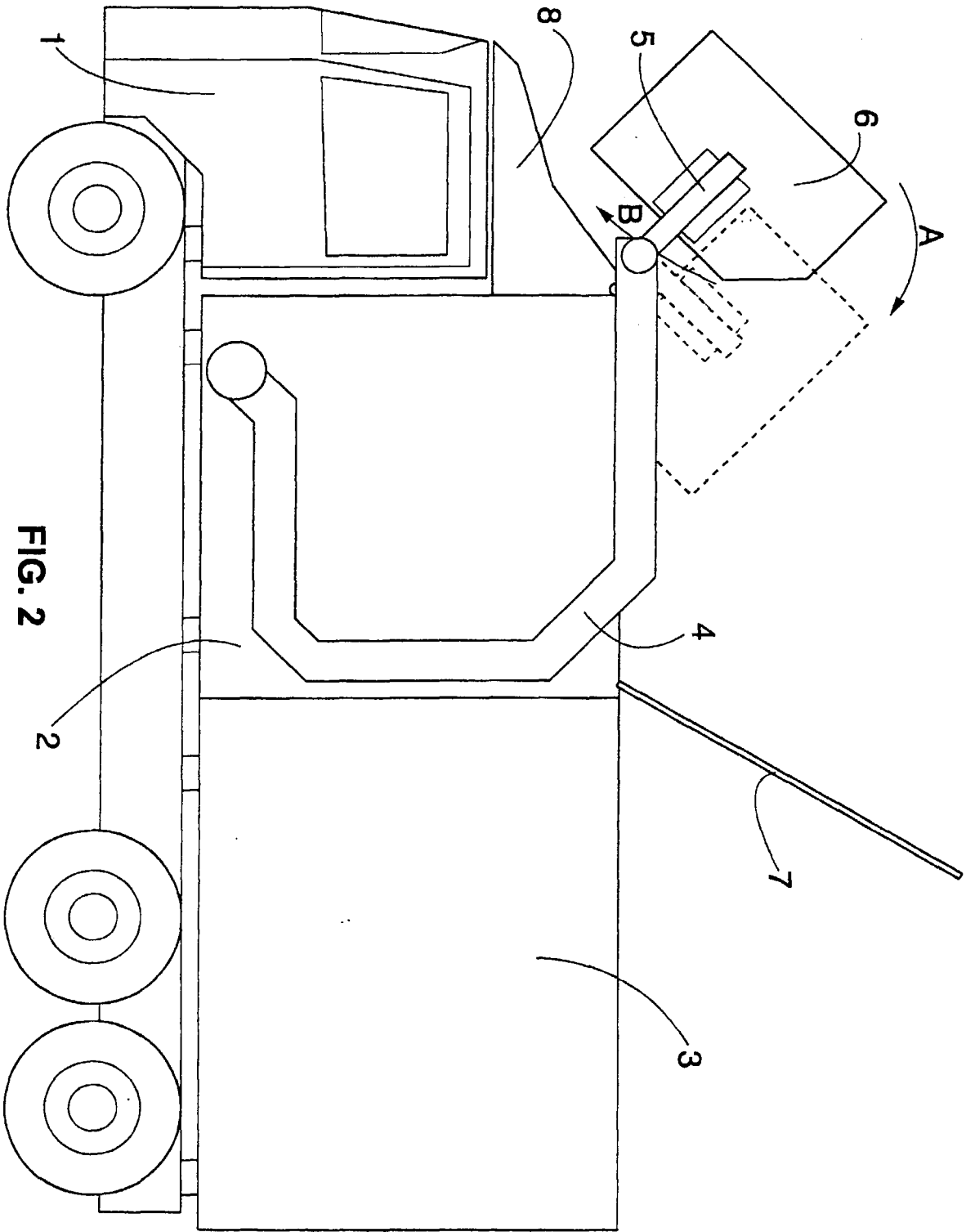


FIG. 2

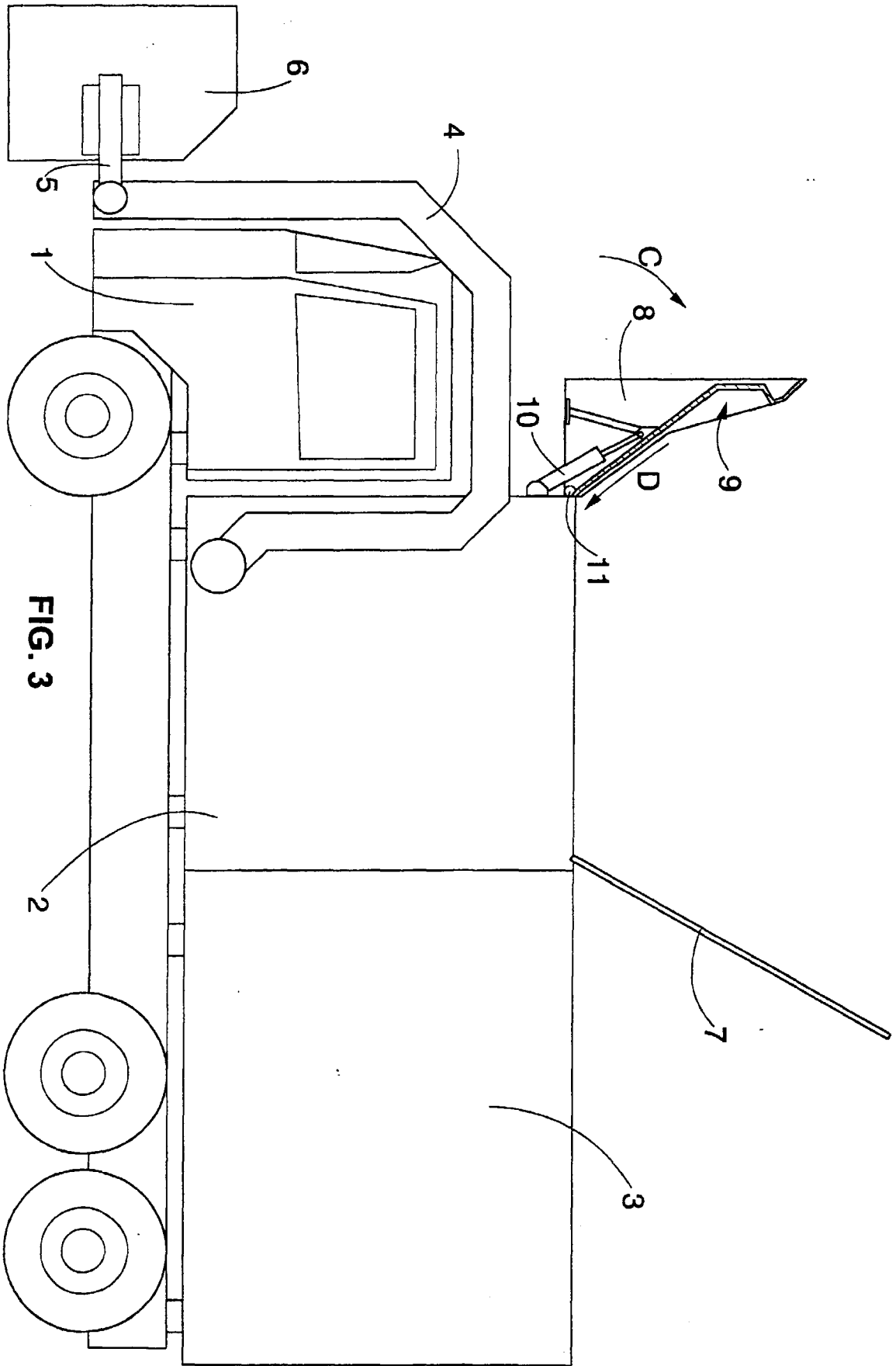


FIG. 3



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EUROPEAN SEARCH REPORT

Application Number
EP 00 66 0121

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 3 870 174 A (J. BRISSON) 11 March 1975 (1975-03-11) * the whole document * -----	1-4	B65F3/04
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B65F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21 September 2000	Examiner Smolders, R
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 66 0121

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21-09-2000

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US 3870174 A	11-03-1975	CA 1005794 A	22-02-1977

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82