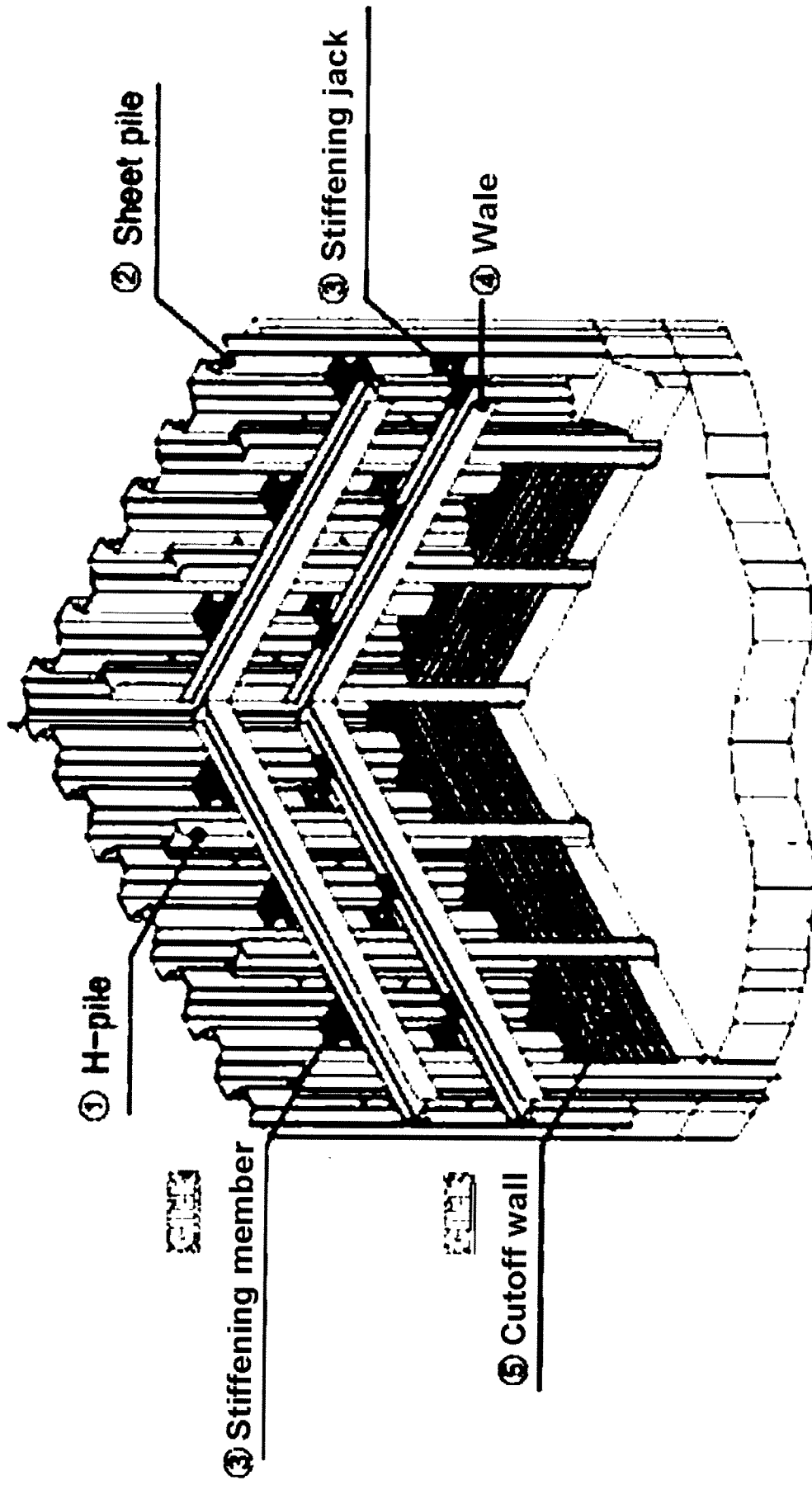
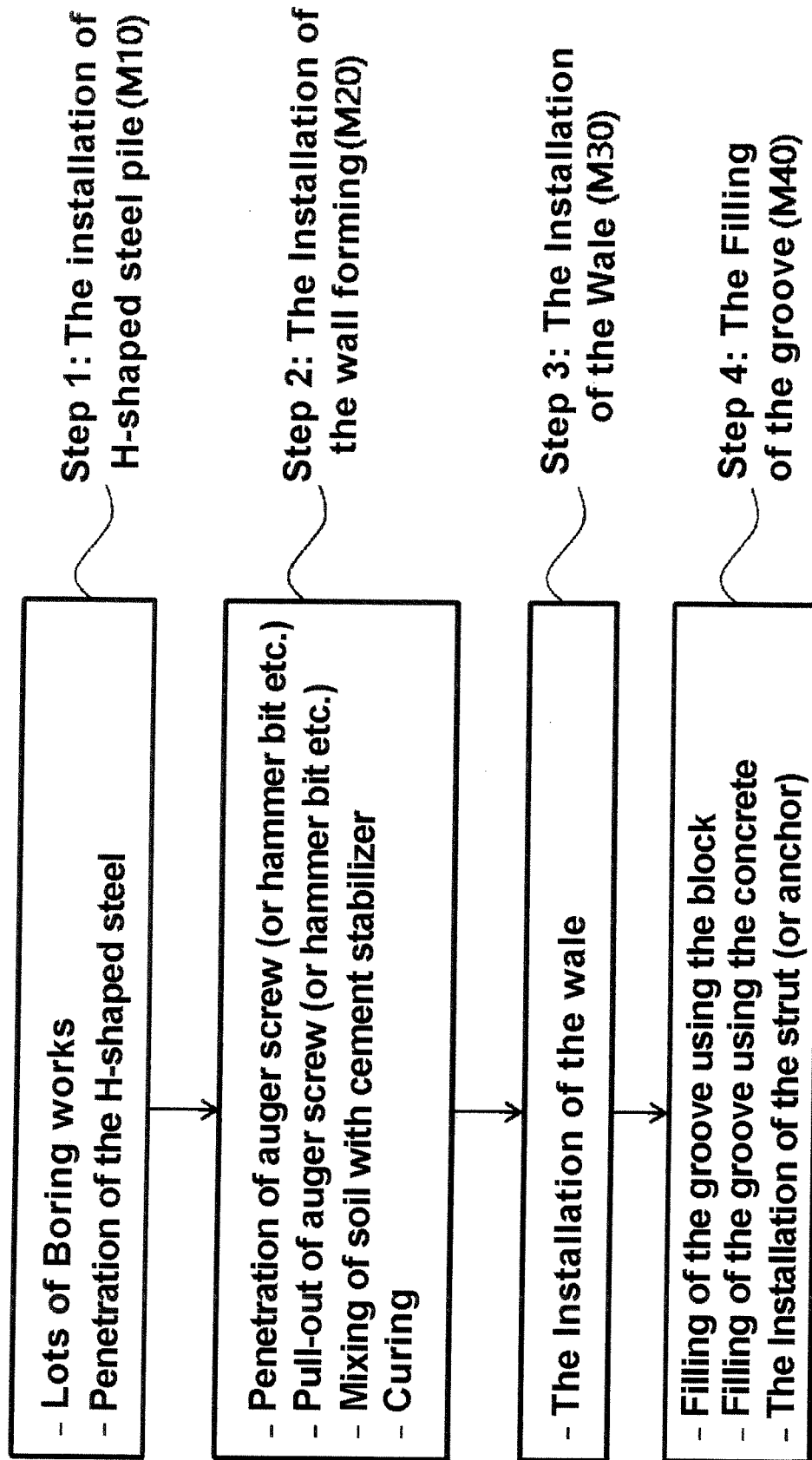


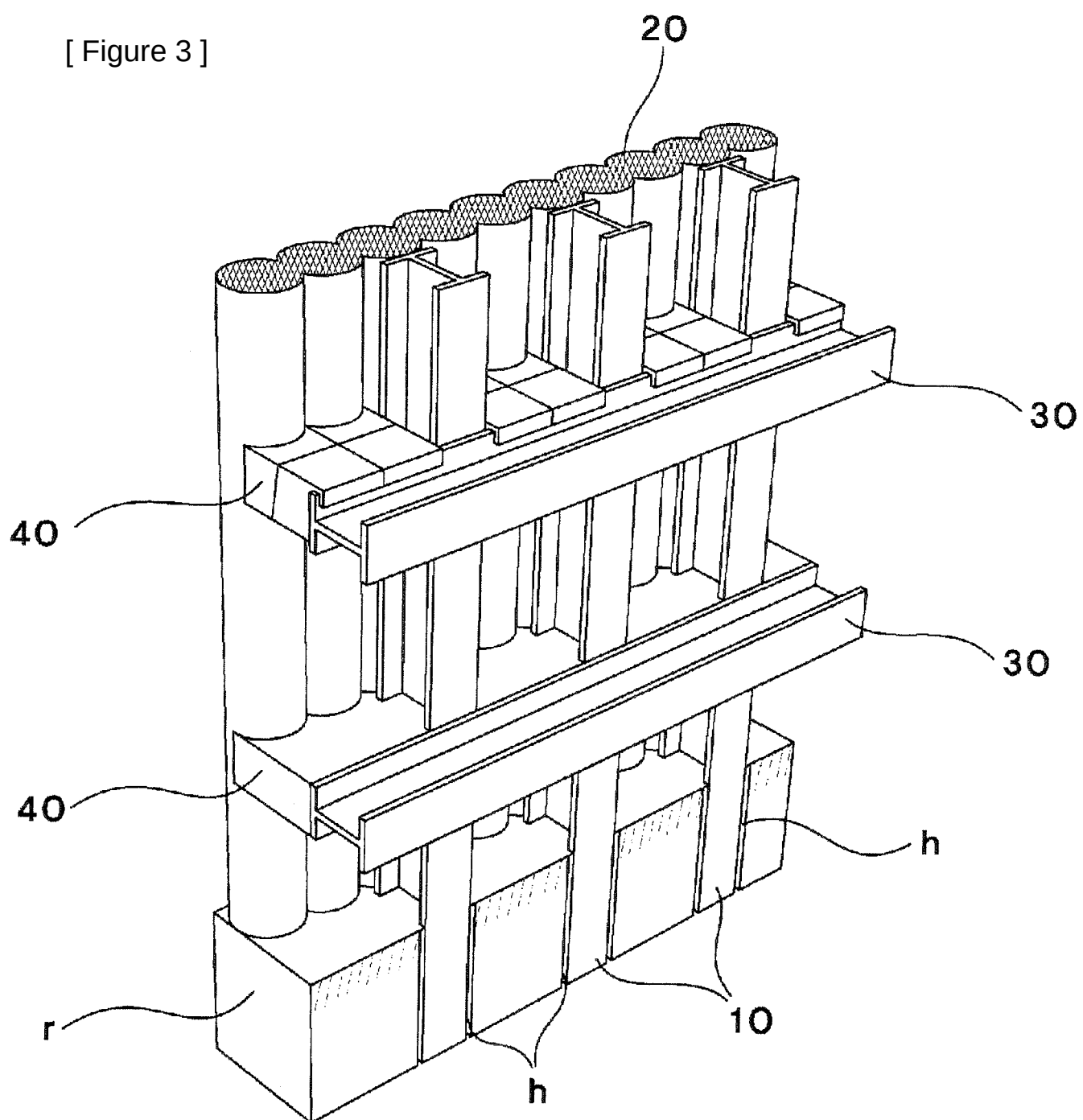


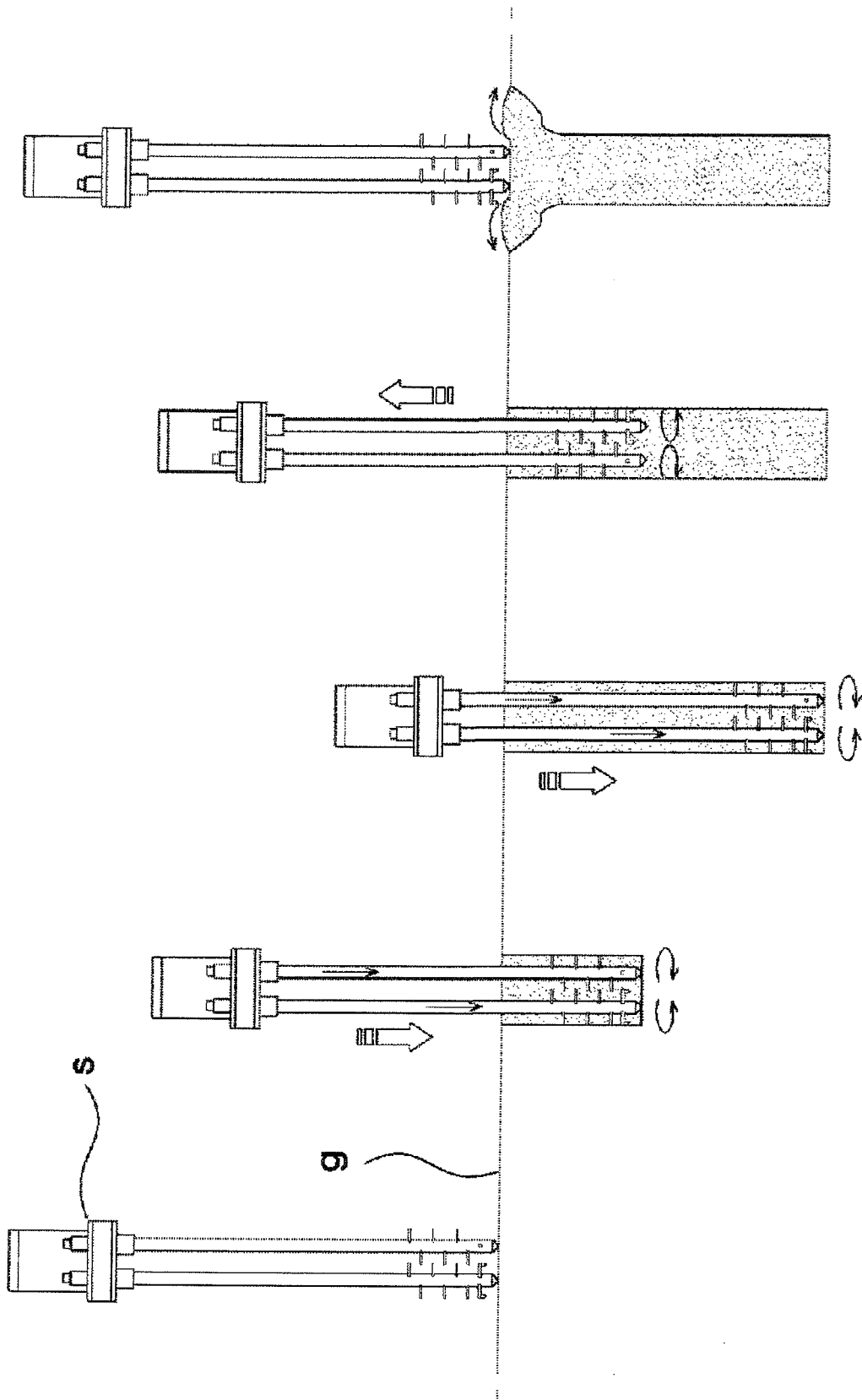
[Figure 1]

[Figure 2]

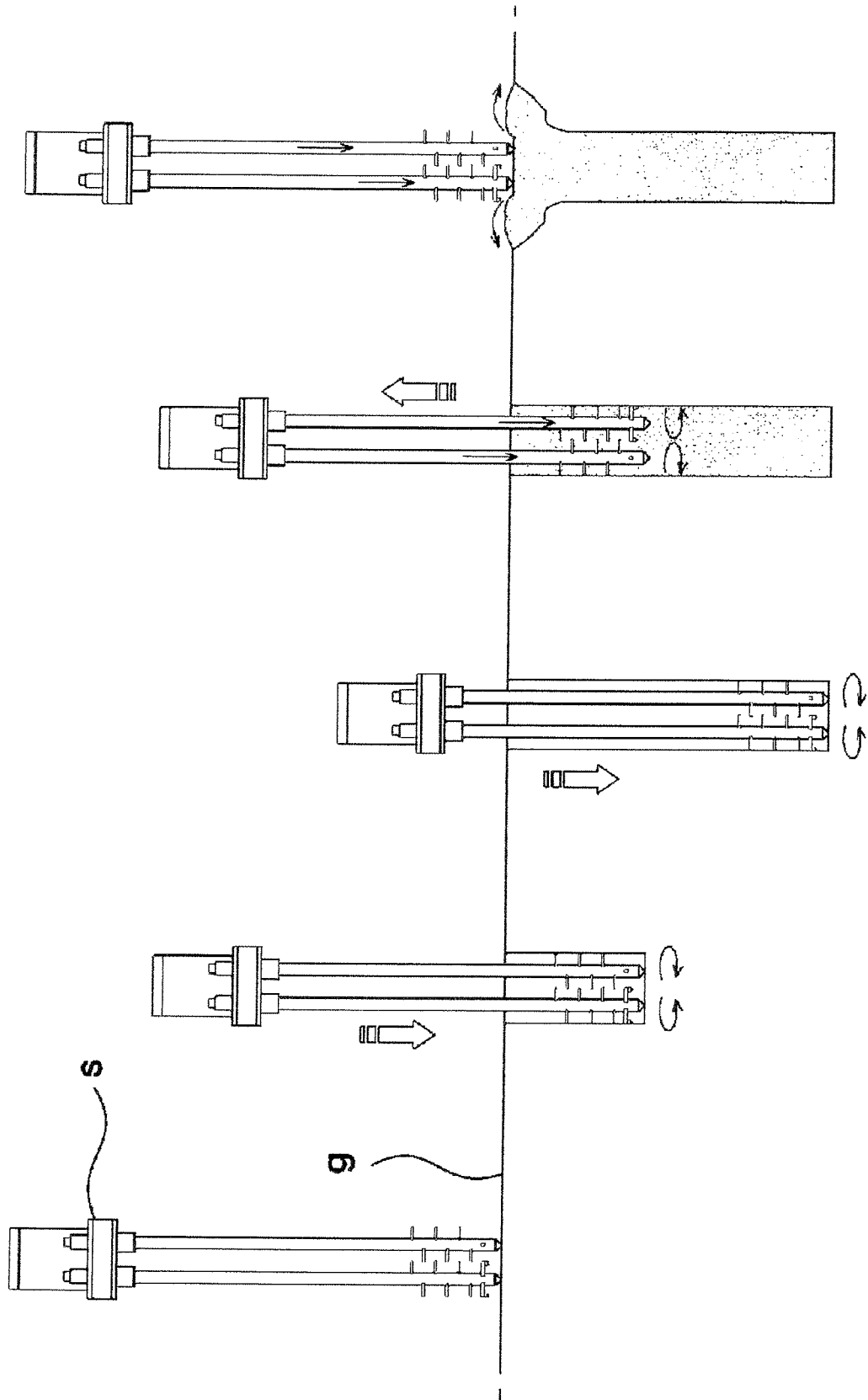


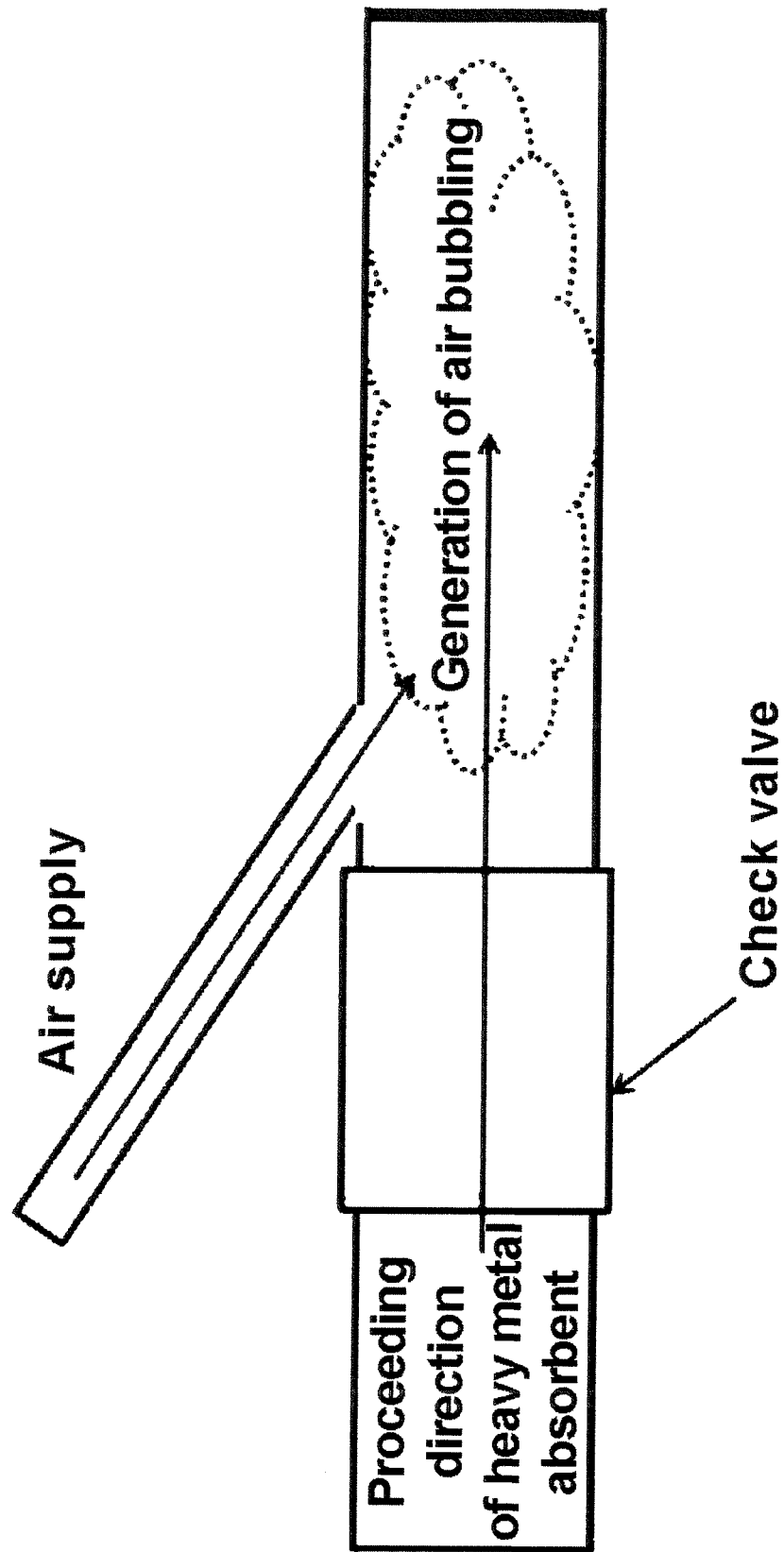
[Figure 3]



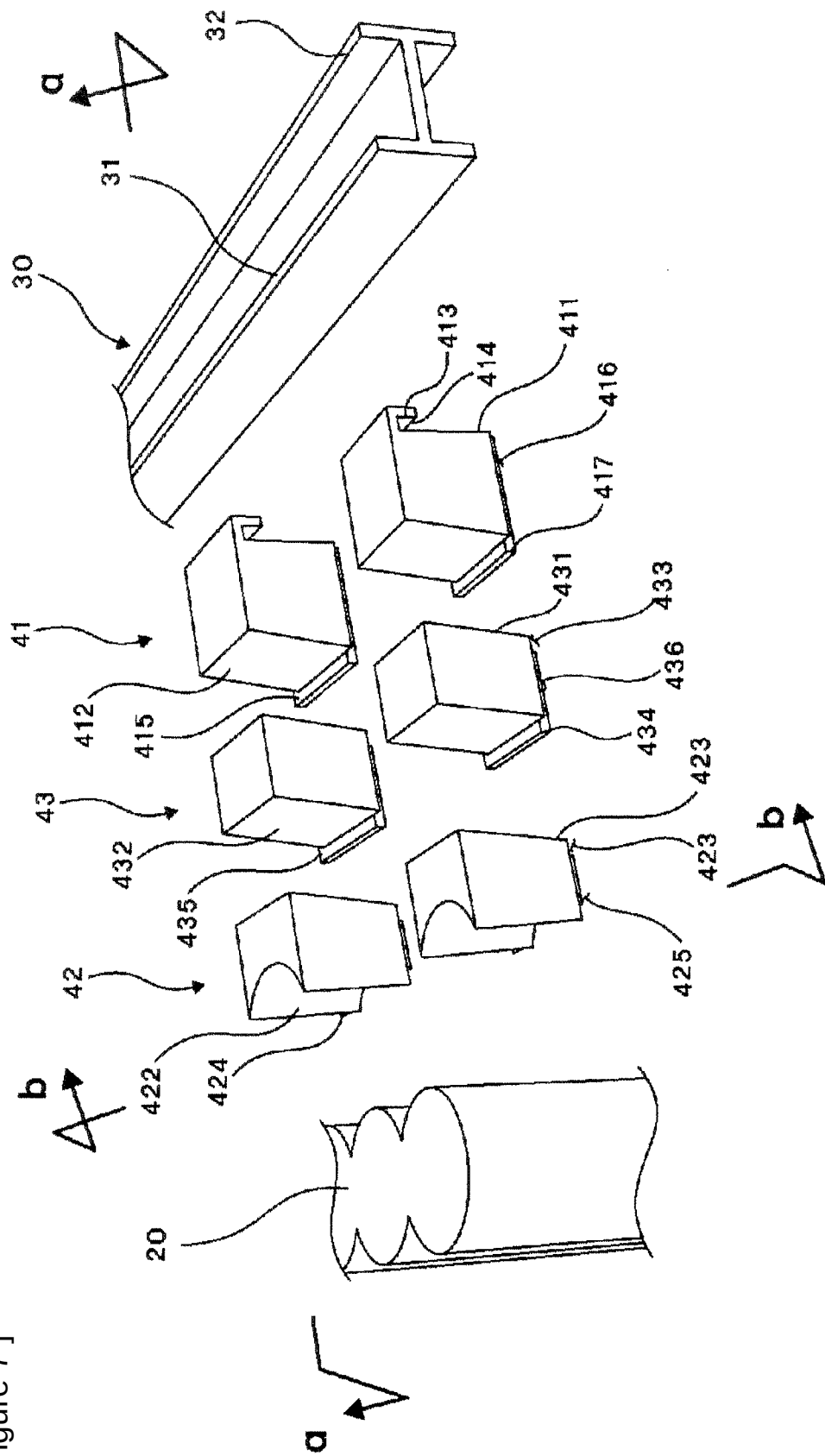


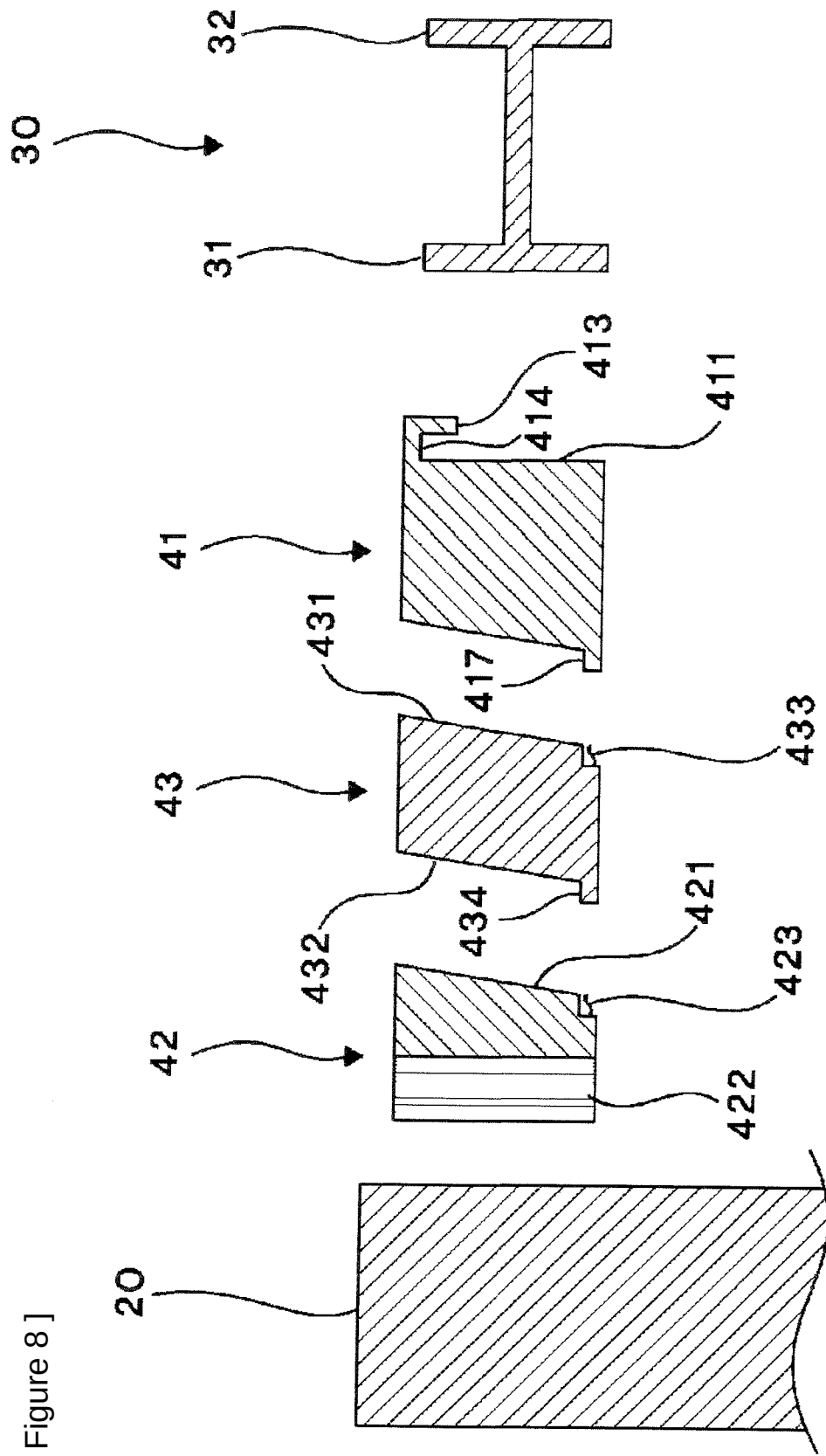
[Figure 4]



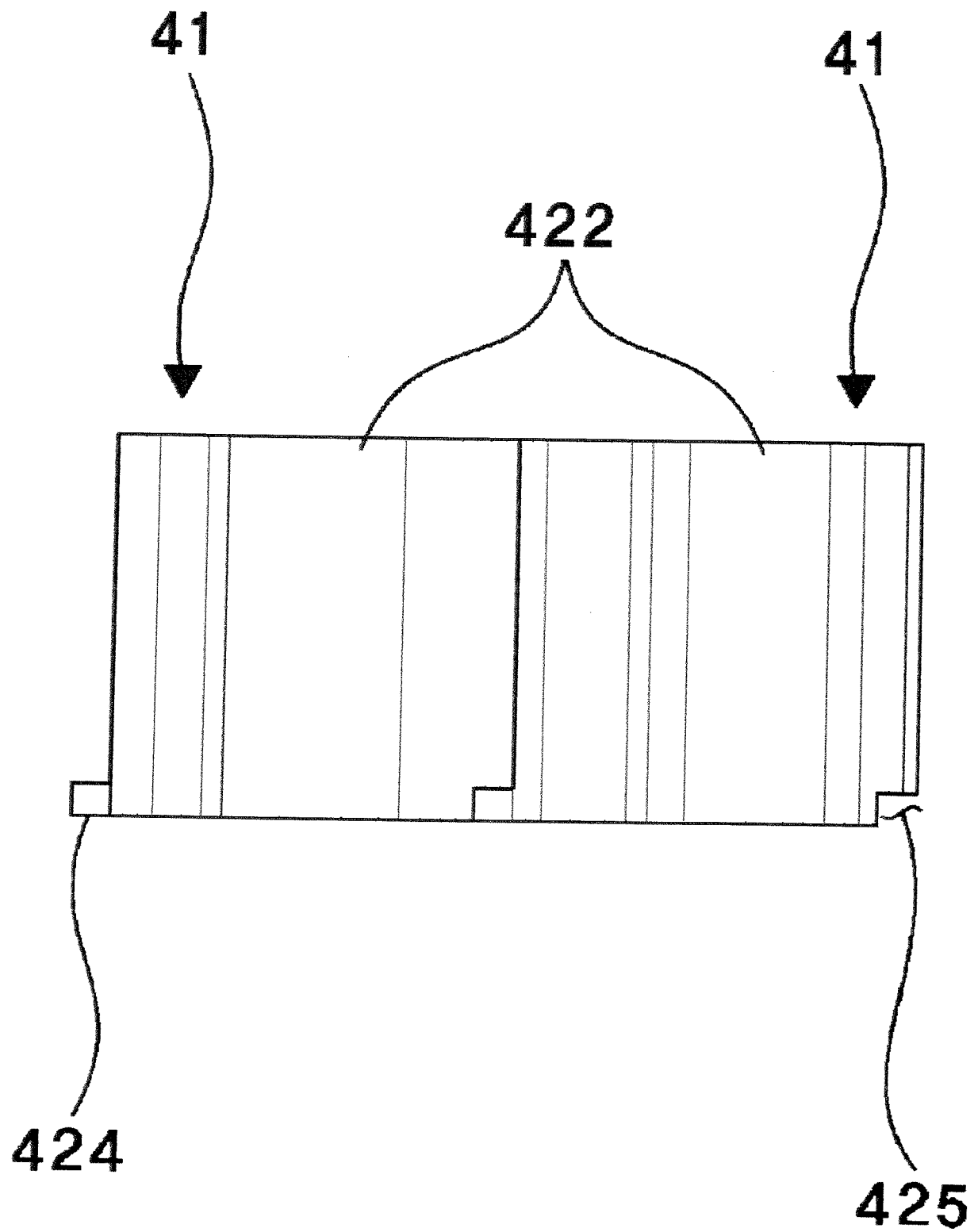


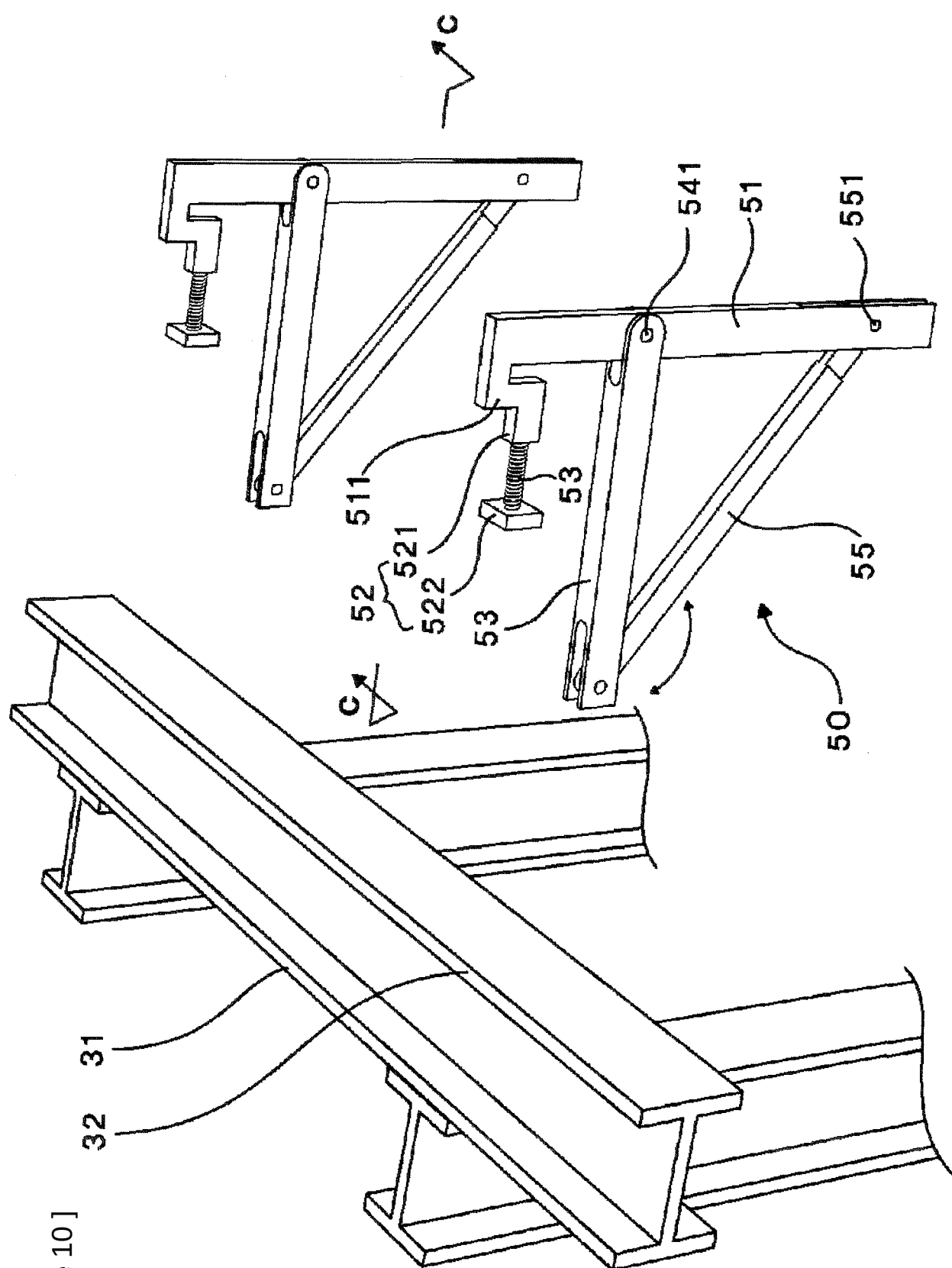
[Figure 6]





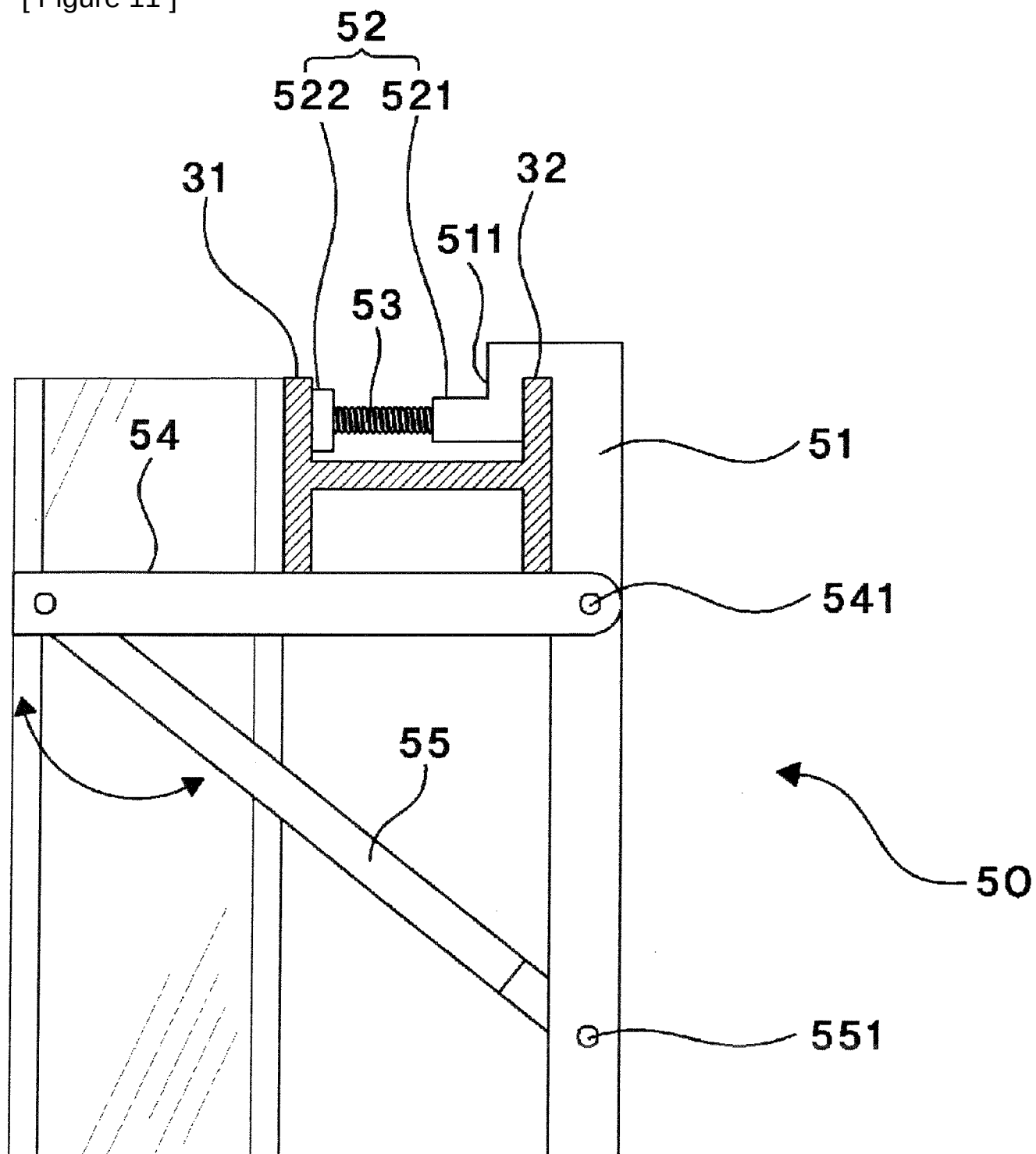
[Figure 9]





[Figure 10]

[Figure 11]



[Figure 12]

Items	Quality criteria The Criteria of quality control	Remarks
Bleeding ratio	Less than 3%	KS F2433
Ratio of volume change	Less than $\pm 3\%$	KS F2433
Unconfined compression strength	Above 2Mpa	KS L 5105 (Standard curing during 28 days)
Turbidity	Less than 50	KS F 4009
The Elution concentration of Cr6+	Less than 0.05mg/l	The test criteria of waste processing. Notified no. 2008-96 from Ministry of Environment.

[Figure 13]

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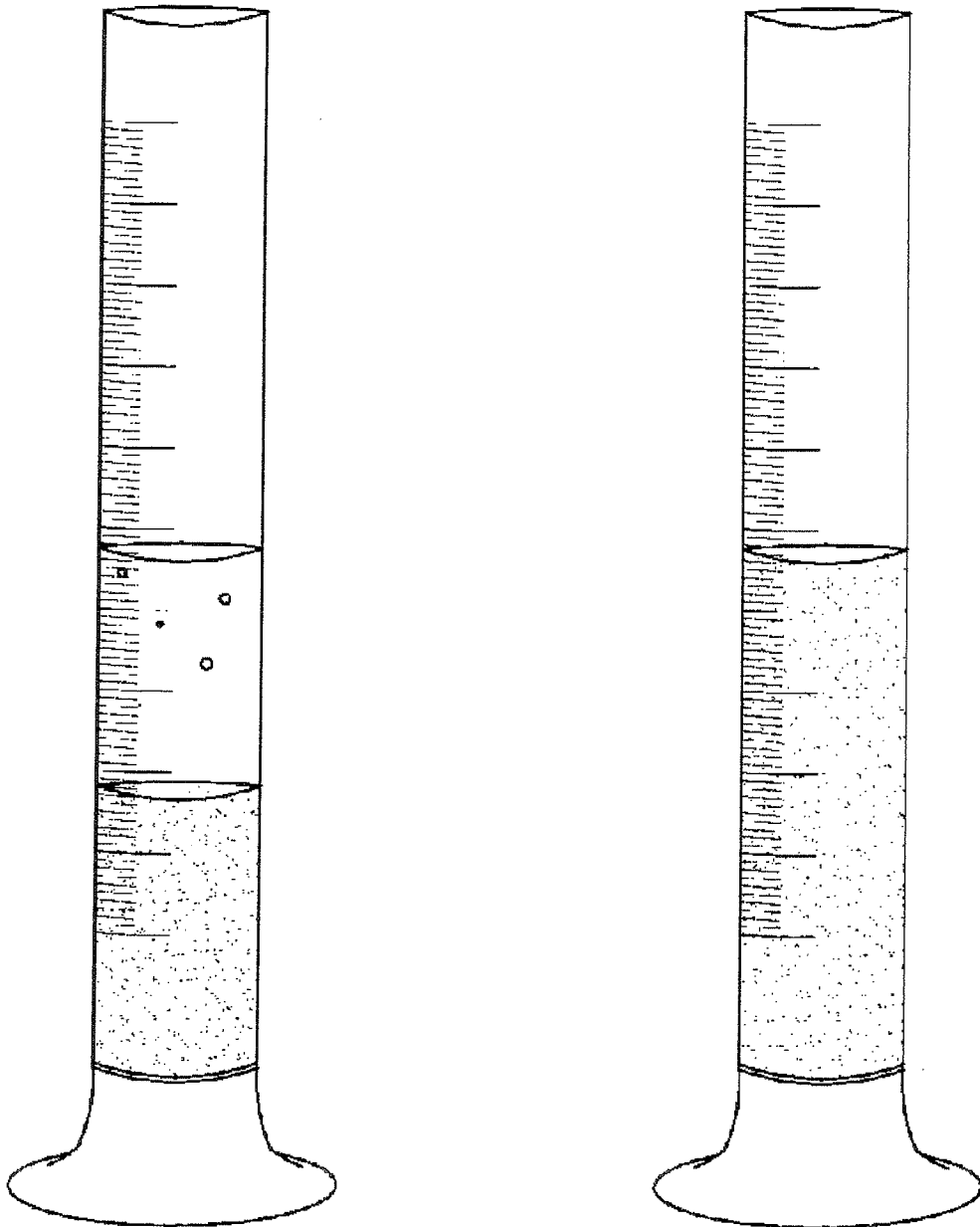
(unit: g)

Items	Comparative example 1	Comparative example 2	Embodiment 1	Embodiment 2	Embodiment 3	Embodiment 4
Water	423	423	423	423	423	423
Cement	321	423	308	308	308	303
Calcium aluminate				5	5	5
Calcium sulfur aluminate				8	8	8
Anhydrous gypsum						3
α -type gypsum hemihydrate						2
Heavy metal adsorbent			3.1	3.1	6.2	3.1

[Figure 14]

Items	unit	Comparative example 1	Comparative example 2	Embodiment 1	Embodiment 2	Embodiment 3	Embodiment 4
Bleeding ratio	%	55	38	8	2	2	1
Ratio of volume change	%	55	38	8	2	2	1
Unconfined compression strength	MPa	—	—	5.0	5.5	4.7	6.2
Turbidity		330	380	48	27	32	28
The Elution concentration of Cr6+	ppm	8.6	8.8	0	0	0	0

[Figure 15]



[Figure 16]

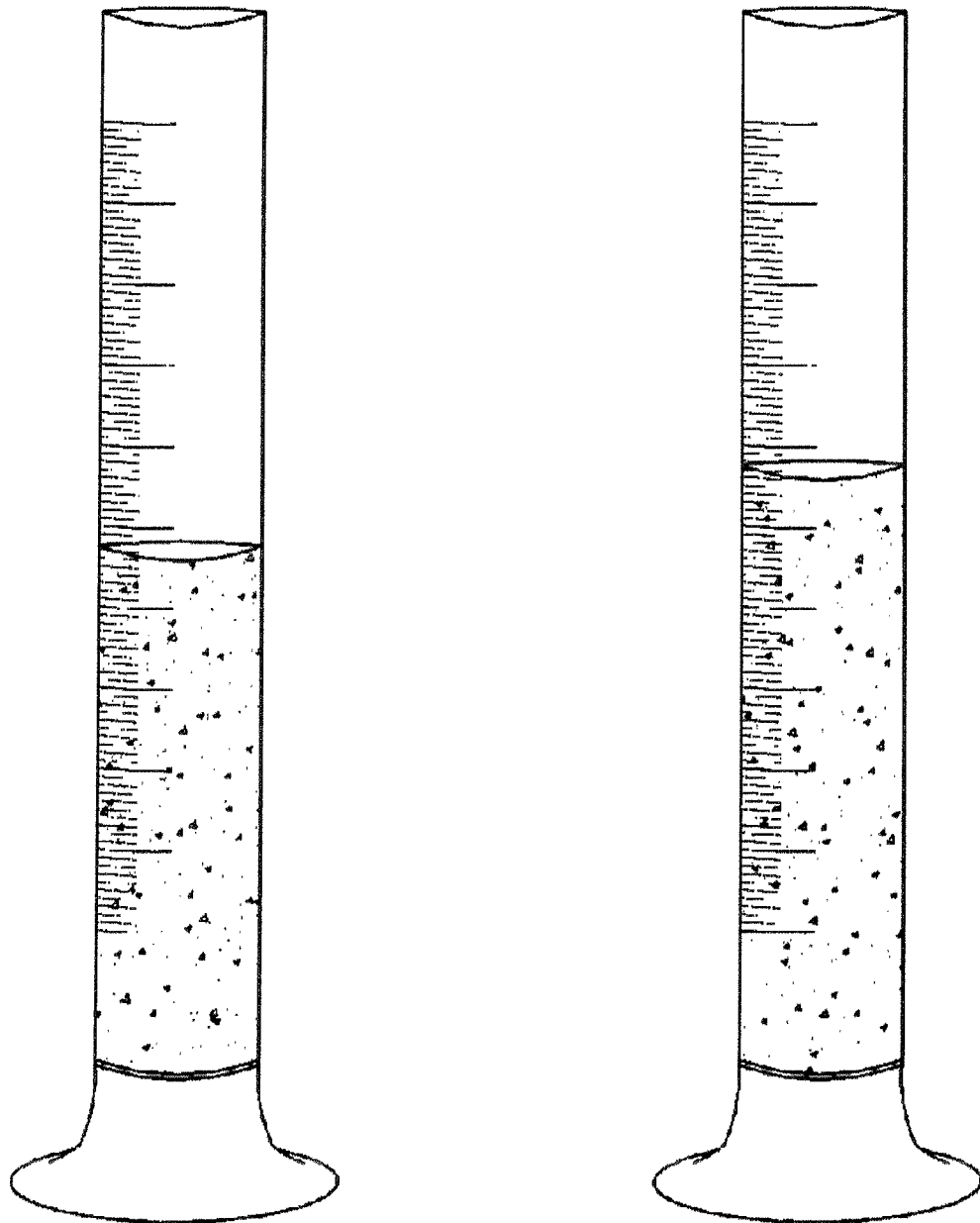
(unit: g)

Items	Comparative example 1	Comparative example 2	Embodiment 1	Embodiment 2	Embodiment 3	Embodiment 4
Water	423	423	423	423	423	423
Cement	321	423	321	308	308	303
Calcium aluminat				5	5	5
Calcium sulfur aluminat				8	8	8
Anhydrous gypsum						3
α -type gypsum hemihydrate						2
Heavy metal adsorbent			3.1	3.1	6.2	3.1
Soil	1,000	1,000	1,000	1,000	1,000	1,000

[Figure 17]

Items	unit	Comparative example 1	Comparative example 2	Embodiment 1	Embodiment 2	Embodiment 3	Embodiment 4
Bleeding ratio	%	9	5	1	0	0	0
Ratio of volume change	%	9	5	1	0	0	0
Unconfined compression strength	MPa	3.7	5.1	3.0	3.3	2.8	3.7
Turbidity		270	125	41	23	12	23
The Elution concentration of Cr6+	ppm	2.60	1.05	0	0	0	0

[Figure 18]



[Figure 19]

