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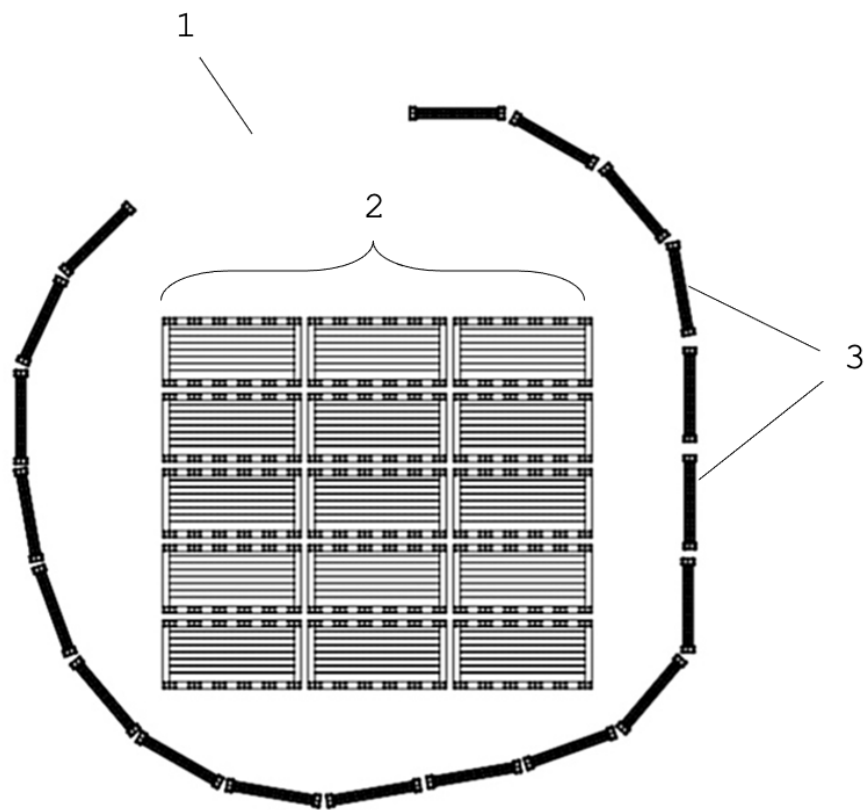


Fig. 1

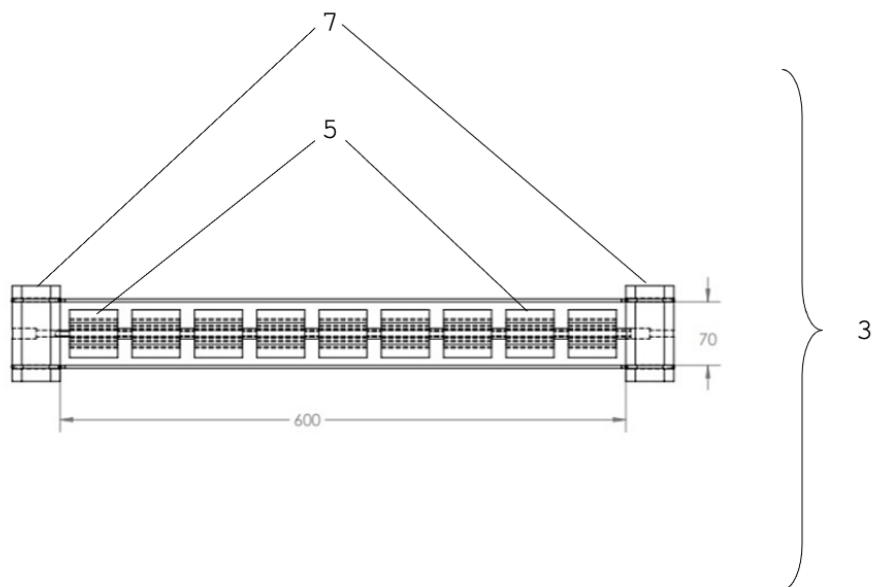


Fig. 2(a)

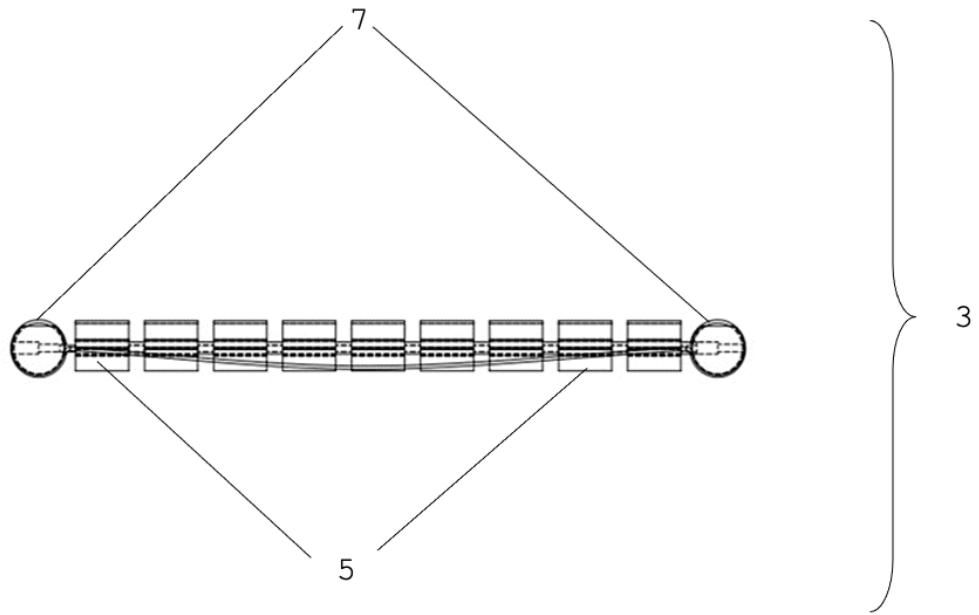


Fig. 2 (b)

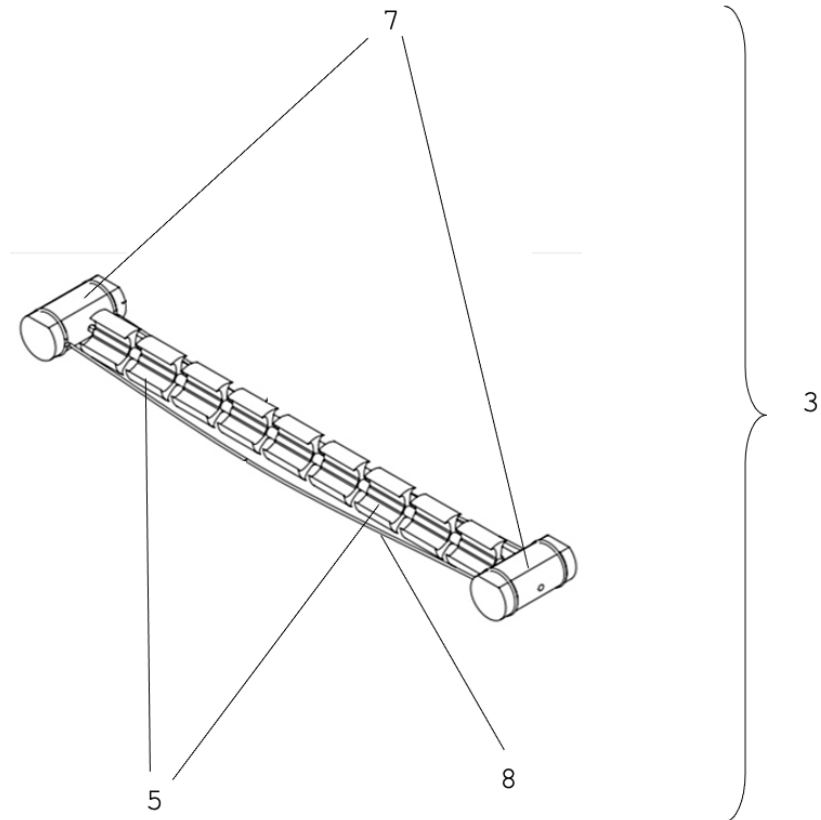


Fig. 2 (c)

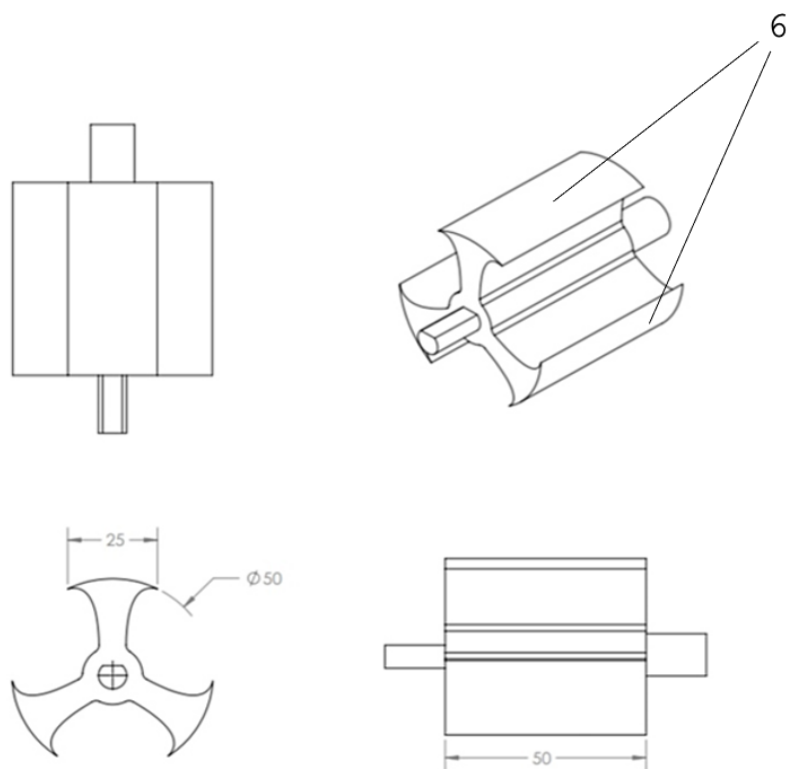


Fig. 3

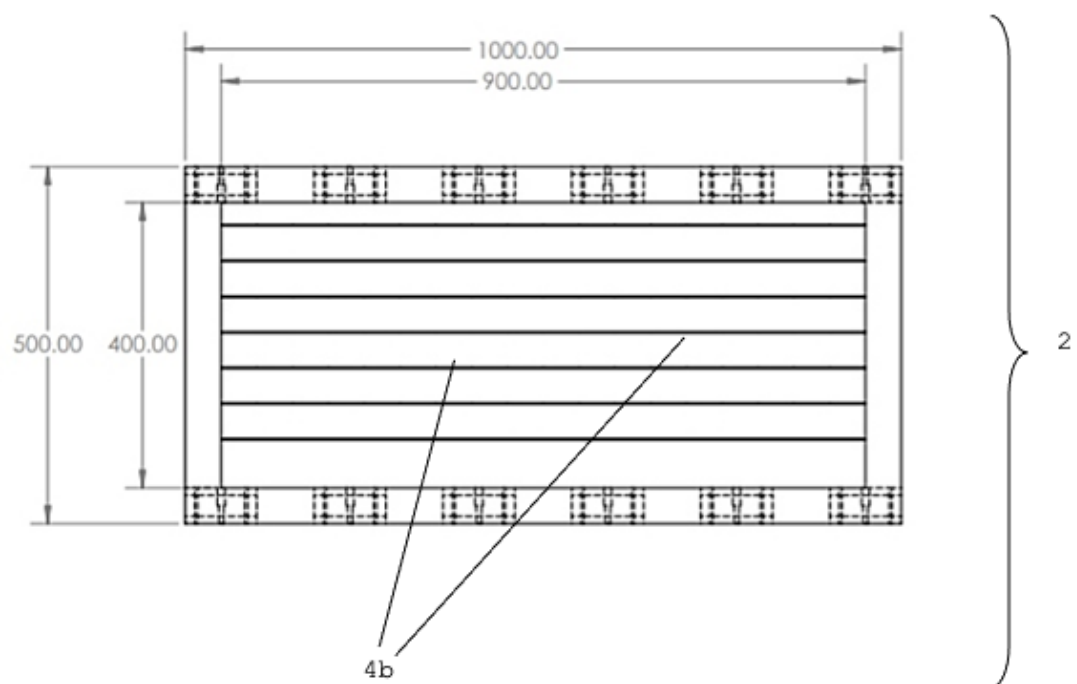


Fig. 4 (a)

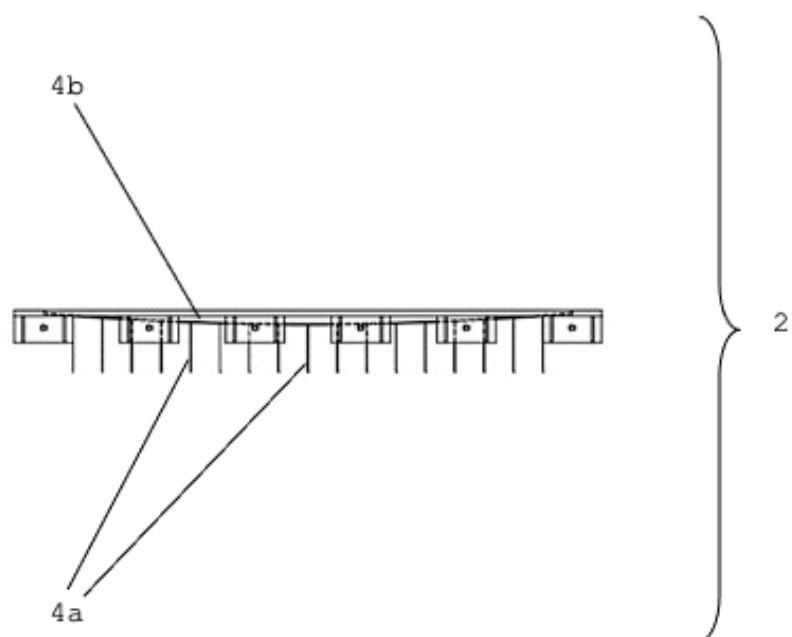


Fig. 4 (b)

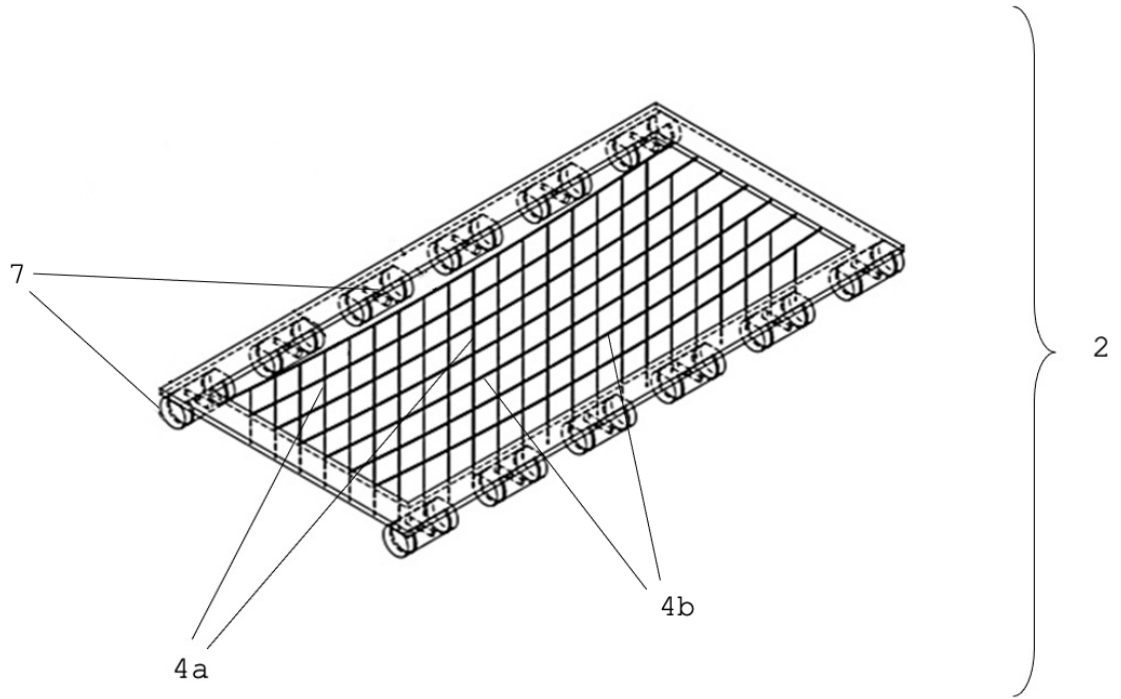


Fig. 4(c)

Table 1

Bacteria (Probiotic)	Fish tested	Activity
Bacillus licheniformis (TSB27), Lactobacillus thuringiensis, Bacillus Plantarum, Bacillus subtilis (B46)	Sparus aurata L.	Enhancement of the immune system
Shewanella putrefaciens Pdp11	Solea senegalensis	Modulates the digestive microbiota, an increase in growth
Bacillus pumilus H2	Fish	Anti-Vibrio activity
Bacillus subtilis WB60	Anguilla japonica	Increase in weight, efficiency in food and protein
Lac. pentosus BD6, Lac. fermentum LW2, Bacillus subtilis E20, Saccharomyces cerevisiae P13	Asian seabass	Improves either the growth performance or disease resistance of Asian seabass against A. hydrophila
Pseudoalteromonas sp.	Seriola lalandi	Increase of larval survival
Pseudoalteromonas sp.	Seriola lalandi	Increase of larval survival
Lactobacillus plantarum	Oreochromis niloticus	Decreases mortality and improves growth
Bacillus subtilis, Lactobacillus rhamnosus	Labeo rohita	Increases the value of biochemical components
Lactobacillus casei	Keureling fish (Tor tambra)	Growth performance and feed efficiency increased
Bacillus sp. MVF1	Labeo rohita	Decreases susceptibility to disease
Bacillus subtilis, Bacillus licheniformis	Juvenile rainbow trout	Enhanced resistance against A. salmonicida
Kocuria SM1, Rhodococcus SM2	Oncorhynchus mykiss	Produces extracellular enzymes that may have a role in the host digestive processes
Vibrio lentus	Dicentrarchus labrax	Protective effect against Vibriosis caused by V. harveyi in sea bass larvae
Lactobacillus plantarum	Tilapia	Enhances the growth performance and modulated some hematological parameters.

Bacillus megaterium PTB 1.4	Catfish	Increases the activity of digestive enzymes and the growth of catfish
Lactobacillus rhamnosus	Pagrus major	Growth-promoting agent and increases growth
Lactobacillus acidophilus, Bacillus subtilis, Lactobacillus bulgaricus, Saccharomyces cerevisiae	C. gariepinus	Increases larval survival
Bacillus megaterium, Bacillus polymyxa, Lactobacillus delbrueckii	Oreochromis sp.	Increases the performance of zootechnical parameters
Enterococcus casseliflavus	Oncorhynchus mykiss.	Improves growth performance and enhancing disease resistance by immunomodulation
Pseudoalteromonas sp.	Fish	Inhibitory activity against fish pathogens
Pseudoalteromonas sp. Cepa MLms gA3	Fish	Inhibitory activity against the pathogen V. anguillarum
Bacillus sp., Pediococcus sp.	Solea senegalensis	Improvement protection against pathogen outbreaks and
Lactobacillus plantarum (LP20)	Seriola dumerili	Improves immune response and stress
Lactobacillus mesenteroides SMM69, Weissella cibaria P71	Scophthalmus maximus L.	Antimicrobial activity against the turbot pathogens T. maritimum and V. splendidus
Bacillus subtilis, Bacillus licheniformis, Bacillus sp., Pediococcus sp.	Oreochromis sp.	Resistance to S. agalactiae
Enterococcus faecalis	Oncorhynchus mykiss	Favouring growth, stimulation of the immune system and protection against diseases