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(57) Naprava za izučavanje inercijalnih sila, sastavljena je iz platforme (2) na koju su sa strane postavljeni točkovi (1). Na platformu (2) sa gornje strane je poprečno čvrsto postavljen ram (8) na koji su sa gornje strane učvršćeni akumulator (12) i simetrično dva elektromotora (10) sa regulatorima (11) za podešavanje broja obrtaja. Na vratila (9) elektromotora (10) učvršćene su cevi (6), koje su sa donje strane u istoj osi pomoću osovinica (4) uležištene u platformu (2), tako da se cevi (6) mogu obrtati u horizontalnoj ravni. Cevi (6) su po sredini pregrađene, i u njih su sa obe strane postavljene kugle (3) čiji je prečnik manji od unutrašnjeg prečnika cevi (6).

Na platformu (2) pomoću vijaka (13) pričvršćeni su držači (5) na koje su čvrsto spojeni prstenovi (7) koji prolaze kroz horizontalne preseke koji se nalaze sa obe strane cevi (6), pri čemu je moguće podešavanje rastojanja centara prstenova (7) u odnosu na osu elektromotora (10), tj. cenara rotacije cevi (6). U skladu sa idejom pronalaska, pomoću regulatora (11) moguće je menjati brzine i smerove obratanja cevi (6), a preko vijka (13) menjati veličinu ekcentričnosti rotacije kugli (3) u odnosu na centre rotacije cevi (6), jer je putanja kugli (3) definisan aunutrašnjim obimom prstena (7). S obzirom da veličina centrifugalne sile kugli (6) zavisi od poluprečnika rotacije i ugaone brzine, na taj način moguće je podešavati brzinu i pravac kretanja kolica.

(54) DEVICE FOR STUDING INERTIAL FORCES

(57) Device for studying inertial forces, consists of a platform (2) whereon are laterally set wheels (1). On the platform (2) from the top transversally and firmly set is a frame (8) onto which are from the top fixed a cell (12) and symmetrically two electric motors (10) with regulators (11) for adjusting number of revolvments. On the shafts (9) of the electric motor (10) are fixed the pipes (6), that are from the bottom side in the same axis by means of the pins (4) set in the platform (2), thus the pipes (6) may revolve in horizontal plane. The pipes (6) are along the middle separated, and in them are from the both sides set the globes (3) diameter of which is shorter than the internal diameter of the pipe (6). On the platform (2) by means of the screws (13) are fixed the holders (5) whereon are firmly fixed the rings (7) that go through horizontal crosssections set on both sides of the pipe (6), where adjusting of the distance of the center among the rings (7) is allowed in relation to the axis of the electric motor (10), i.e. center of rotation of the pipe (6). Along with the idea of the invention, by means of a regulator (11) it is possible to change the speed and directions of rotation of the pipe (6), and by the screw (13) to alter the size of rotation eccentric of the globes (3) in relation to the center of rotation of the pipe (6), as the path of the globes (3) is defined by the internal circumference of the ring (7). As the size of the centrifugal force of the globes (6) depends on the radius of rotation and speed of angle, thus it is allowed to adjust the speed and direction of motion of the wheels.

