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The invention relates to the mechanical engineering, in particular to the mechanical variable-speed gears.
The precession planetary variable-speed gear contains two gearings: a helical gearing with balls and a precession one with engagement. The variable-speed gear includes the drive shaft 1, engaging by means of a pin 2 a bush 3, onto the spherical plane of which there is made a sinusoidal groove, wherein there are placed the rolling elements, which simultaneously are placed into the grooves of the separator 5 and mesh with the slots of the bush 6. The external bush 6 is rigidly joined with the driven shaft 7 mounted in bearings 8 and coming in contact with the rolling elements 9, at the same time its outer surface is made cylindrical with inclined axis and face, onto which by means of the rolling elements there is installed the block satellite gear 10. On one side of the block satellite gear 10 there is fixed an immobile gear-wheel 11, and on the other side – a mobile gear-wheel 12, installed onto the hollow driven shift 13. The bush 3, the inner surface of which is made cylindrical with inclined axis, is mounted onto the bush 14, one part of which is made inclined, installed onto the drive shaft 1, and the other part coaxial with the drive shaft. Onto the outer surface of this part of the bush 14 there are placed slots, coming in contact with the internal slots of the bush 15. Onto the inner surface of the inclined part of the bush 14 there is made one tooth, which is conjugate to the longitudinal groove, made onto the drive shaft 1. Onto the bush 15 there is installed the bearing 16, placed into the bush 17, rigidly joined with the crank 18.
The result consists in enlarging the functional possibilities and in simplifying the design of the mechanical variable-speed gears.

Claims: 1
Fig.: 3