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Technical University of Moldova,
Department Manufacturing Engineering

TOOTHPICK HARDENING DEVICE

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Goal:

Broadening the technological possibilities, simplifying the construction of the device.

Patent application MD 6583 from 18.12.2019

Solution:

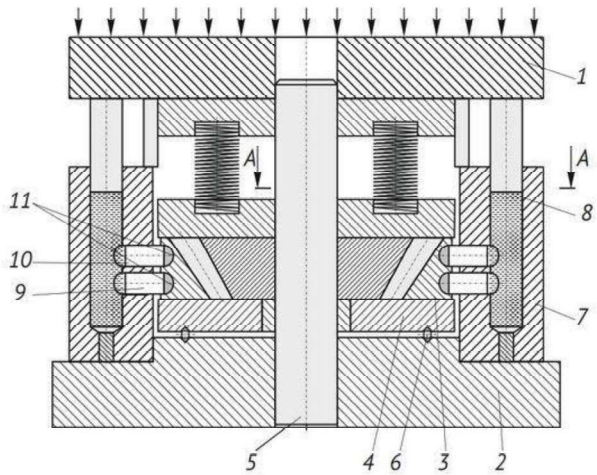
The transmission of the force of the working parts of the device by means of the working environment, as an example of the high pressure liquid, forms a uniform load on all the pistons and of course also on all the loading elements.

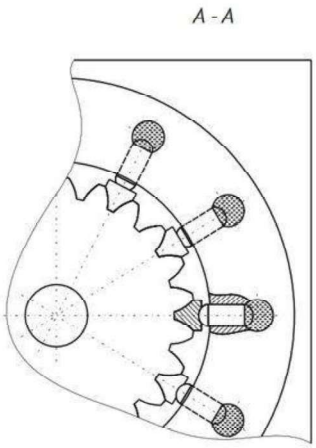
Avantages:

High efficiency;
- Simplification of device servicing;
- More simplified and rigid construction;
- Simple and quick adjustment of the device for another wheel.

Stage:

Computerized model.





Description of the invention: The invention relates to the processing of pressure metals and can be used to increase the bearing capacity of the teeth. Purpose of the invention - broadening the technological possibilities, simplifying the construction of the device. The device is composed of the mobile drive disk 1, the fixed body 2, on which the hardening mechanism 3 is mounted, movable installed on the perimeter of the rotating disk 4 on the central spindle 5 and is based on the body 2 by means of the balls 6. In the body 2 it is installed a block 7, which has a high pressure cavity 8, holes, which communicate with the cavities of the block 7, and the pistons 9 and 10. The pistons 9 and 10 contact on the one hand with the mobile drive disk 1 and on the other hand with the elements loading 3, forming with its front part and loading elements 3 spherical joints 11.

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