along each other in opposite directions. Another disadvantage of this solution is the mechanism of anchoring the interbody spacer in the vertebral body, which does not provide a secure fixation during reposition and causes spacer's elements to project from vertebral margins after reduction of pathology, thus endangering biological structures situated in this area.

Summary of Invention

In one aspect, there is provided a device for a surgical displacement of vertebrae, containing two parts cooperating in a sliding way:

- a sliding part with an internal thread,
- a carrier part, and
- a driving element with an external thread located between them,

where:

- a driving element (4) is provided with a head (5),
- the sliding part (1) of the device is provided with a threaded guideline (2) cooperating with the driving element (4),
- the carrier part (3) of the device has got a cylindrical seat (12) with the diameter and length corresponding with head's (5) diameter and length, and
- the sliding part (1) and carrier part (3) are provided with cooperating elements: at least one shaped element (8) and a second shaped element (9) constituting a lock preventing separation of the parts (1, 3) in the perpendicular direction to the longitudinal axis of the device,

characterized in that

the sliding part (1) of the device is provided with a seat (14) of the diameter corresponding with the diameter of head (5), and with length larger than head's (5) length.

Detailed Description of the Invention

Free of the above mentioned inconveniences is a device comprising an implant for surgical displacement of vertebrae, which is composed of two parts co-working in a sliding way : a sliding part with an internal thread and a carrier part, and also a driving element with an external thread which is located between the parts. According to the invention, the driving element is provided with a head, whereas the sliding part of the device is equipped with a threaded guideline cooperating with the driving element and a seat of a diameter corresponding with the head's diameter and length greater than the head's length, and the carrier part has a seat of a diameter and length corresponding with the head's diameter and length. Furthermore, the sliding part and the carrier part are provided

with cooperating shaped elements, which form a lock preventing separation of both parts in the direction perpendicular to the device longitudinal axis during performance of corrective actions. The lock is formed by at least one element, which is located in the sliding part and one element in the carrier part. In one embodiment of the device, the element of the lock located in the sliding part of the device is in the form of a cylinder. In another embodiment, the shaped element is in the form of a fragment of a cuboid.

The threaded guideline in the sliding part and carrier part is in the form of a sleeve. Preferably, this sleeve can be open longitudinally.

The external surface of the sliding part and carrier part is provided with drive-anchoring elements, which are in the form of shelves provided with resistance surfaces and at least one shaped cutting knife. In one embodiment of the device, the drive-anchoring elements are provided with gaps. In another embodiment, at least one shelf is articulated with a shaped seat on the external surface of the device. Preferably, the movable shelf is provided with a resistance projection. The drive-anchoring elements, which constitute the outfit of the external part of the device's sliding part, are located at an angle of 0 up to 100°, and the drive-anchoring elements of the carrier part are situated at an angle of 0 up to 100° in relation to the external surface.