CLAIMS

1. A medical apparatus (10) for guiding a medical implement (19),
the apparatus (10) comprising:

a mechanical mechanism (11) comprising:

a first mechanism portion (12) having a first portion of addition (128), and including a contact element (151) having a contact point (154), configured for disposition on a selected emplacement (EMPL) on a portion of a body (BDY), and

a second mechanism portion (14) having a second portion of addition (148), and including an operation module (16) configured for guidance and support of the medical implement (19), wherein the mechanical mechanism (11) is further configured to:

permit displacement of the contact element (151) and of the operation module (16) relative to each other in bidirectional motion of translation along a segment of a straight line, and

maintain the medical implement (19) in permanent aim at the selected emplacement (EMPL) via an open aperture (1510) of the contact element (151), said aperture being configured for visual inspection and/or tactile palpation therethrough of the selected emplacement (EMPL),

wherein the first portion (12) and the second portion (14) are disposed in a first plane of operation (1PL), and the first portion of addition (128) and the second portion of addition (148) are disposed in a second plane of operation (2PL), and the first plane of operation (1PL) and the second plane of operation (2PL) are either one of the same plane and a different plane,

wherein the mechanical mechanism (11) is further configured to support at least one stopper element (20) which is configured for controllable adjustment of disposition to fixedly set a gap of separation (210) which separates apart between the contact point (154) of the contact element (151) and a tip (198) of the medical implement (19),

wherein the at least one stopper element (20) is adjustable to limit a depth of penetration of the medical implement (19) into a blind bore BBOR until arrested by the stopper (20) and/ or by finger detection.

2. The apparatus of claim 1, wherein the mechanical mechanism (11) is characterized by having each one of both the first and the second portions (12, 14) formed as a structure having a general shape of a rectangular frame.

3. The apparatus of claim 1, wherein the mechanical mechanism (11) is further characterized by being configured for disposition with the second plane of operation (2PL) having a desired angle α relative to the first plane (1PL), wherein the angle α is fixed or adjustable.

4. The apparatus of claim 1, wherein the open aperture (1510) of the contact element (151) is configured for a fingertip (FNGRTP) to pass therethrough just to make manual tactile contact with the fingertip (FNGRTP) as the contact point (154).

5. The apparatus of claim 1,

wherein controllable adjustment of disposition of the stopper element (20) includes at least one of a fine adjustment control and a coarse adjustment control.

6. The apparatus of claim 1, wherein:

the implement guide (17) is further configured to support at least one medical implement (19) in aim at the contact element (151), and

the implement drive (18) is configured to drive the at least one medical implement (19) alone and in combination, in at least one of linear translation motion, rotational motion, and reciprocation motion.

7. A method for constructing a medical apparatus (10) according to any of claims 1 to 6 for guiding a medical implement (19) for implantation of medical implants, including orthopedic implants, dental implants and zygomatic implants (ZI),
the method being characterized by comprising:

constructing a mechanical mechanism (11) including:

providing a first mechanism portion (12) coupled to a first portion of addition (128) and having a contact element (151) made for disposition on a selected emplacement (EMPL) on a portion of a body (BDY),

providing a second mechanism portion (14) coupled to a second portion of addition (148) and having an operation module (16) made for supporting a medical implement (19),

wherein the first portion (12) and the second portion (14) are disposed in a first plane of operation (1PL), and the first portion of addition (128) and the second portion of addition (148) are disposed in a second plane of operation (2PL), and the first plane of operation (1PL)

and the second plane of operation (2PL) are either one of the same plane and a different plane,

adapting the mechanical mechanism (11) for aiming a longitudinal axis (198) of the medical implement (19) at an open aperture (1510) of the contact element (151) which is configured for visual inspection therethrough by visual scruting and/or tactile palpation of the selected emplacement (EMPL), and for

providing mutual relative displacement between the operation module (16) and the contact element (151) in bidirectional translation motion along a segment of a straight line and in permanent mutual aim of the medical implement (19) in orientation directed along the straight segment of line, and

forming the contact element (151) as a gimbal mechanism (1511) having at least three degrees of freedom of rotation.

8. The method of claim 7, wherein:

the operation module (16) includes an implement guide (17), and an implement drive (18) which is slidable into and out of the former, and

retrieval of the implement drive (18) out of the implement guide (17) allows the latter to support and guide medical implements (19) therein.

9. The method of claim 8, wherein the implement guide (17) is adapted for support and guidance of various dental implements (19) by use of diameter-matching adaptor sleeves (173), wherein adaptor sleeves (173) are supported in the implement guide (17) in exchangeable engagement therein and releasable extraction thereout.

10. The method of claim 7, wherein:

the contact element (151), formed as a gimbal mechanism (1511), has an open aperture (1510) which is adapted for:

disposition on a selected emplacement (EMPL), and

provision of inspection by visual scrutiny and tactile palpation of the selected emplacement (EMPL) through the open aperture (1510).