with said concavity resulting in the distance between said corresponding apertures being in smallest.

Further characterizing features of the invention will appear from the following claims as well as from the disclosure below with reference to a preferred, but not limitative, embodiment of the invention.

FIG. 1 illustrates the intraocular lens according to the invention.

FIG. 2 shows the section II—II in FIG. 1.

FIG. 3 illustrates the intraocular lens according to the invention with one of the loops pulled inwards towards the optical part.

FIG. 4 illustrates the intraocular lens according to the invention with both loops pulled inwards toward the optical part.

In FIG. 1 the intraocular lens 1 according to the invention is illustrated. For simplicity it is called an IOL below. IOL 1 comprises an optical part 2 and a haptic part in the shape of two loops 3*a* and 3*b*. The optical part 2 is provided with small peripherally arranged first apertures 4, 5, provided in the root of loops 3*a*, and 3*b*, respectively, as will appear from FIG. 1. If desired, there may be provided further small first apertures 6, 7 which may possibly be of further aid in case of adjustment of the position of the IOL 1 in the lens bag.

At its free end loop 3*a* is provided with a portion 8 in which there is an aperture 9. In a similar manner a portion 10 with an aperture 11 is provided at the free end of loop 3*b*. Said apertures 9 and 11 constitute said second apertures of the intraocular lens. Apertures 4, 11 and 5, 9 are termed corresponding apertures, respectively. At the root of loop 3*a* a portion 12 of the loop is concavely shaped and essentially complementary to portion 10 of loop 3*b*. In a similar manner there is a lateral portion 13 at the root of loop 3*b* facing loop 3*a* and being concave and essentially complementary to portion 8 of loop 3*a*. When one or both loops are flexed inwardly said corresponding apertures will be as close to one another as possible, and at the same time the loop or loops will extend as closely as possible to the optical part 2, as will appear from FIGS. 3 and 4. In the embodiment shown in FIG. 3 the corresponding apertures 4, 11 between the optical part 2 and loop 3*b* are joined by the aid of a suture 14. In many cases it will not be necessary to connect apertures 5, 9 by a suture, since loop 3*b* is in this case the first to be inserted into the lens bag. In FIG. 3 loop 3*b* is indicated by a dashed line to illustrate its original position before the surgeon pulls loop 3*b* into contact with concavity 12 and the suture connection between corresponding apertures 4, 11.

In some case it may be advantageous to the place of operation or the surgery technique that both loops 3*a* and 3*b* are flexed in towards the optical part 2. In this case, as illustrated in FIG. 4, it will be sufficient to connect apertures 9 and 11 in loops 3*a* and 3*b* respectively, by suture 15. As shown in FIG. 4 portion 10 will contact the concave portion 12 on optical part 2 and, correspondingly, portion 8 on loop 3*a* will contact the concave portion 13 on the optical part 2. Obviously, it is possible, as vaguely indicated in connection with FIG. 3, that the loops are flexed inwardly toward the optical part, and are secured by the aid of a suture between said corresponding apertures 4, 11 and 5, 9, respectively. It will, however, be understood that the solution shown in FIG. 4 will be sufficient in this case and, additionally, have the great advantage that only one suture must be cut to release loops 3*a* and 3*b* from each other for engagement with the lens bag.

In the shown solution according to the invention it will, thus, be understood that it is important to provide the corresponding apertures 4, 11 and 5, 9, respectively, in order to be able to pull loops 3*a*, 3*b* as close as possible to the optical part 2 while said IOL is placed in the lens bag. Due to the fact that the root of the loop is provided with said concavity 12 and 13, respectively it is possible to pull the loop further inwards toward the optical part 2 to bring said corresponding apertures 4, 11 and 5, 9, respectively, closer together. Consequently, the maximum cross sectional dimension of IOL is also reduced, which is of great importance to an unproblematic insertion of IOL into the lens bag of the eye.

With the present invention the problems connected with flexing the loops inwards are avoided, simply due to surgeon, before the intraocular lens is inserted, providing the suture 14 or suture 15 are illustrated in FIG. 3 or FIG. 4, respectively while the lens lies on a sterile support. Then, the lens can be inserted into the lens bag whereafter the suture is cut and removed.

It should be understood that the configuration of the root 12 and 13, respectively, and the mass or portion 8 and 10, respectively, about apertures 9 and 11, respectively on loop 3*a* and loop 3*b*, respectively, can show variations of the design without changing the principle of corresponding suture apertures 4, 11 and 5, 9. The position of the corresponding suture apertures of an IOL are, thus, determined by the root of the loop. When the loop extends adjacent to the optical part the loop configuration with one suture aperture must be adapted to the root of another loop. The distance between the corresponding suture apertures will then be smallest.

It will be understood that the present invention can be used in connection with intraocular lenses provided with more than two loops, e.g. three or four loops. In case of 3 loops it may be suitable to use separate suture joining for two of the loops whereas the third loop is not tied inwards towards the optical part. In a solution with four loops, two pairs of diametrically placed loops may, e.g. be connected in such a manner as shown in FIG. 4, and it will be obvious that two sutures will be needed which form a mutual angle of 90°.

The above mentioned embodiments and alternatives are only meant as illustrative examples, and it will be understood that the surgeon is free to choose the most suitable suture connection for the loops, in consideration of the technique of surgery and other surgical conditions.

It appears from FIG. 2 that the lens can be double convex in a manner known per se, and that it may be provided with a peripherally extending bead 16, a so-called laser-ring. The object of the laser-ring is to prevent the lens 2 from being damaged in case of a possible later treatment of the lens bag with laser in order to remove any residual tissue or further darkening due to insufficient cleaning or stripping of the lens bag before implantation of the IOL. Utilization of laser-rings is known per se.

Having described my invention, I claim:

1. In an artificial intraocular lens having an optical medial body means (optical part), and a supporting peripheral body means (haptic part) in the shape of at least two loops integral with and projecting from said optical part at roots thereof, said optical part being provided with two or more small peripherally-provided first apertures, and each of said loops at the root thereof being provided with one of said first apertures, and said loops each being provided with a second aperture at a