

UNITED STATES PATENT OFFICE.

OTTO ESSBACH, OF KLINGENTHAL, GERMANY.

SURGICAL SEWING MATERIAL CONSISTING OF A COMPOUND OF CATGUT AND SILK.

1,180,386.

Specification of Letters Patent.

Patented Apr. 25, 1916.

No Drawing.

Application filed February 21, 1914. Serial No. 820,358.

To all whom it may concern:

Be it known that I, OTTO ESSBACH, a subject of the King of Saxony, and resident of Klingenthal, Germany, have invented certain new and useful Improvements in Surgical Sewing Material Consisting of a Compound of Catgut and Silk, of which the following is a specification.

Hitherto, it is generally known to use for surgical purposes sewing-material which consists of silk or catgut threads. The former are employed if it is possible to remove the threads after healing, while the latter are used for sewing inner organs, as the catgut threads dissolve gradually in the interior of the body, without causing any damage to the latter. Practice has proved, however, that the employment of pure catgut threads has the drawback that their dissolution happened too early, that is before the sewed place was completely healed. Thus, sudden breaks of the inner sewed wound occur and thus endanger the life of the sick person. To overcome this drawback, extremely strong and firmly twisted catgut threads have been used for preventing a tearing of the same or a too early dissolution.

This strength and tightness prevents, however, a sufficient sterilization, as these catgut threads must be sterilized after their manufacture only.

These and other drawbacks, which frequently endanger a human life, are, according to the present invention, overcome by the employment of a thread made from a mixture of catgut threads and fine silk fibers. The advantage derived from this new thread is that the catgut threads will be entirely absorbed while the fine silk fibers are adapted to become so encysted in the tissues of the body that they need not be removed after the wound heals.

What I claim, is:

A surgical sewing-material, comprising a mixture of catgut threads and fine silk fibers, the former adapted to be entirely absorbed and the latter to become so encysted in the tissues of the body that they need not be removed after the wound heals, substantially as and for the purpose set forth.

OTTO ESSBACH.

Witnesses:

GUSTAVE OTTO RODACK,
ROBERT H. NIER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."