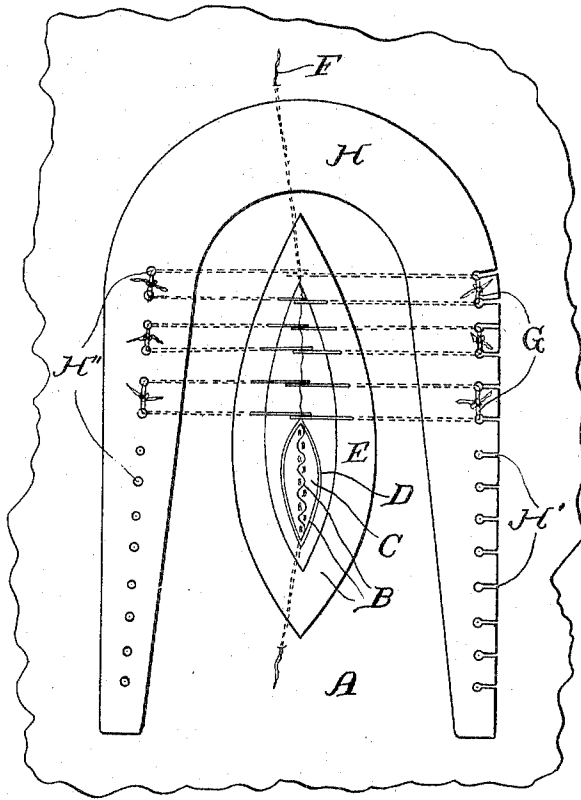


No. 784,018.

PATENTED FEB. 28, 1905.

O. O. WITHERBEE.
SUTURE SUPPORTING PLATE.
APPLICATION FILED APR. 6, 1903.



Witnesses
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UNITED STATES PATENT OFFICE.

ORVILLE O. WITHERBEE, OF LOS ANGELES, CALIFORNIA.

SUTURE-SUPPORTING PLATE.

SPECIFICATION forming part of Letters Patent No. 784,018, dated February 28, 1905.

Application filed April 6, 1903. Serial No. 151,396.

To all whom it may concern:

Be it known that I, ORVILLE O. WITHERBEE, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Suture-Supporting Plates, of which the following is a specification.

In the practice of surgery when a surgical operation has been performed in which the abdominal cavity has been opened the different tissues severed must be brought together and held in juxtaposition by sutures sewed therein in the usual manner. The end of the series of sutures which hold muscle-fascia together have heretofore been brought up through the skin at a little distance from the incision and the ends thereof have been tied together in pairs. The skin under these pairs of sutures in this method must sustain the strain, and great inconvenience and suffering are suffered by the patient thereby, and the skin is liable to be torn at the points where these sutures emerge therefrom, and the circulation is more or less impeded where these sutures lie upon the skin.

The objects of my suture-supporting plates are to spread the strain on these sutures over so large an area of skin that the circulation may not be interfered with and to prevent any danger of the skin becoming torn at the point where they emerge from the skin.

The accompanying drawing, forming a part of this specification, shows one of my suture-supporting plates applied to an abdominal incision, with a part of the suture in place closing the incision in the muscle-fascia.

In the drawing, A represents a fragment of an abdomen. B is the incision therein.

C represents the peritoneum.

D represents the muscle-fascia.

E represents the skin and fatty tissue which clings thereto and forms the outer walls of the abdomen.

In the closure of the incision the edges of the peritoneum are drawn together by sutures

F. After this is done the edges of the muscle-fascia are then drawn together by sutures G, which pass out through the skin at a short distance from the incision and are passed up through the notches or openings H' and holes or openings H'' of the suture-supporting U-shaped plate H, the arms of which lie on each side of the incision. These last sutures are tied together in pairs, the ends passing over that part of the plate which intervenes between the notches and holes through which the sutures pass. It is on the muscle-fascia that the greatest strain comes, and for that reason the ends of the parts require supporting to take off the strain on the skin. In some cases side plates only are required. In such cases I prefer to have a row of holes along the center of the plate instead of the notches, as shown in the left-hand arm of the plate shown in the drawing. These plates should be made of some light non-absorbent material, (hard rubber is the preferred material;) but the same may be made of bone, or ivory, or celluloid, or any other substance that will withstand the corrosive action of disinfectants.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A suture-support comprising a U-shaped plate having a row of notches in one arm and a row of holes in the other arm.

2. A suture-support comprising a thin flat U-shaped plate having its arms rigidly connected together, each arm having a plurality of openings extending therethrough, said openings being on the outer sides of said arms.

In witness that I claim the foregoing I have hereunto subscribed my name this 30th day of March, 1903.

ORVILLE O. WITHERBEE.

Witnesses:

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