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1,592,836

F. MOENCH

SURGICAL INSTRUMENT

Filed Nov. 28, 1924

Fig. 1

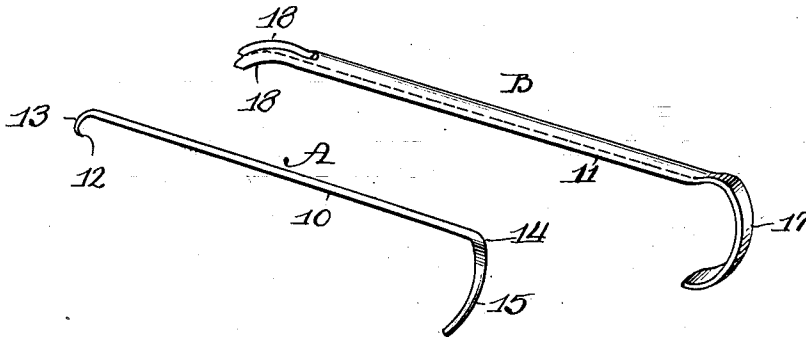


Fig. 2

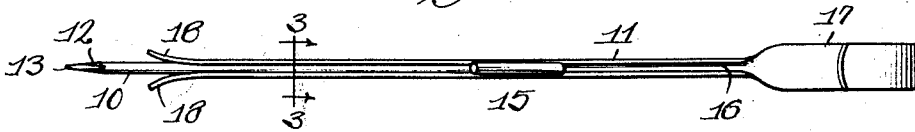


Fig. 3

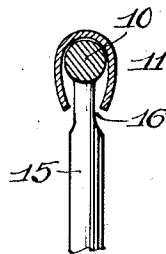


Fig. 4

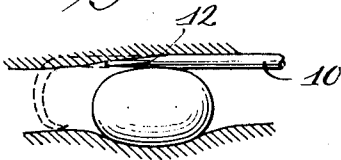
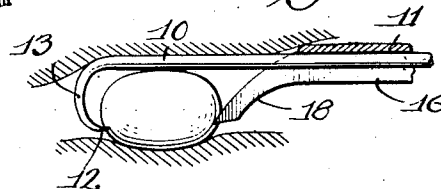


Fig. 5



Witness
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SURGICAL INSTRUMENT.

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My present invention relates to surgical instruments and has more particular reference to an implement for use by surgeons, physicians, and others for the removal of
 5 beans, peas, and similar small objects from the nasal, auricular or other cavities.

As is well known, children while playing with small objects frequently insert them into their nostrils, and the cavities of their
 10 ears, and when this is done with beans, peas, and similar objects, it is quite difficult to remove them with the ordinary facilities available to the parents or other attendants of the children. This difficulty is due chiefly to the
 15 fact that the object is usually round or has a smooth curved outer surface which it is almost impossible to surround or engage in a proper manner to withdraw the object. Numerous structures have been devised for
 20 the purpose of performing the function mentioned, but few of them have met with any degree of success.

It is therefore an object of my invention to provide an instrument for performing such
 25 an operation that is simple in both construction and mode of operation, and which is also of a dependable character so that it may be readily used by a careful person and thereby avoid injury to the adjacent or surrounding tissues of the cavity in which the
 30 foregoing object has become lodged. My device is so constructed that it may be readily separated for the purpose of sterilization; it is of small proportions so that it will
 35 occupy but a restricted space in a medicine or instrument cabinet when not in use; and its parts are of sturdy construction so as to insure dependability when in use.

The foregoing features of my invention I prefer to accomplish in substantially the manner hereinafter fully described and as
 40 more particularly pointed out in the appended claims, reference being now made to the accompanying drawings that form
 45 a part of this specification.

In the drawings:

Figure 1 is a perspective of my instrument showing the parts separated for the
 50 purpose of clearness.

Figure 2, is a bottom plan of the instrument with the parts assembled.

Figure 3 is a transverse section on line 3—3 of Figure 2.

Figure 4 illustrates schematically on an

enlarged scale the manner of inserting the
 55 instrument into a cavity, the forward one of the object-engaging prongs being in the position of passing the lodged object.

Figure 5 is another schematic view showing the manner of gripping the object to
 60 withdraw it from the cavity.

In the drawings I have employed similar reference characters to designate the same parts wherever the same occur throughout
 65 the several views.

Referring to Figure 1, which illustrates a typical or preferred embodiment of my invention, it will be seen the instrument comprises two members A and B the former
 70 of which consists of a rod or shank 10 that is a straight wire or the like one end of which is tapered into a point 12. The portion of the rod or shank immediately adjacent the point is provided with a substantially half bend 13 so as to dispose the
 75 point 12 rearwardly or towards the opposite end of the shank. At its other end the wire forming the member A is given an abrupt lateral bend 14 and the portion beyond this bend is curved into a segmental
 80 shape to provide a finger grip 15.

The member B of the instrument is in the form of a tube 11 of greater length than the straight rod or shank portion 10 of the member A and it is adapted to be telescoped
 85 over this shank portion whereby the finger grip will project through a longitudinal slot 16 in the underside of the tube 11 so that it will slide therein when the members A
 90 and B are moved relative to each other as hereinafter described. The rear portion of the tube is opened out flat and is curved downwardly to provide a convenient hand
 95 grasp 17 substantially in the same manner as the finger grip 15 of the companion member A of the instrument. At the outer end the tube is bifurcated and the metal upon
 100 each side of the slit that provides this bifurcation is flattened and tapered to points that provide spaced prongs 18, 18. It is desirable though not essential to bend these
 105 prongs downwardly and spread their ends apart slightly as seen in the drawings so that the points thereof will be disposed upon each side of the axis of the tube and rod
 110 substantially in alignment with the point of the hook on the outer end of the member A of the instrument when in use. As

will be seen in the sectional view, the interior dimensions of the tube is sufficient to slidably receive the shank 10 of the member A, and from the bend 14 downwardly the wire is flattened or reduced in diameter so that the finger grip will readily enter the slot 16 of the tube, which slot is of less width than the diameter of the wire of which the shank is formed, guiding the members A and B during relative movement and preventing the dislodgement of the shank while performing an operation.

When it is desired to use the instrument the members A and B may be separated by withdrawing the former from the outer end of the latter. The hooked end of the member A is inserted in the cavity between the tissue and the foreign object with the hook positioned flatwise with relation to the object so that the tissue is not unnecessarily distended or irritated, and as soon as the hook has been moved past the object the shank is rotated about a quarter of a turn so that the pointed end 12 of the hook will be in position to engage the inner surface of the object. The member B of the instrument is then slid on to shank 10 with the prongs 18 towards the object and with the finger grip 15 projecting through the slot 16 of the tube. Continued movement of the tube upon the shank brings the prongs into the cavity and into engagement with the outer surface of the object and opposite the point of the hook. The operator now grasps the finger grip 15 and handle 17 and upon exerting a slight pressure towards each other will be able to firmly grip the object between the point of the hook and the prongs, and upon withdrawing the whole structure simultaneously will remove the object from the cavity. The mode of operation may be varied by telescoping or assembling the members A and B, allowing the hook of the shank to protrude say an inch beyond the prongs. The hook may be inserted in the cavity and positioned as before described, after which the tube is slid up and the prongs engaged with the object so that it is firmly gripped for removal.

It will be obvious to others that changes or modifications in the precise structure herein disclosed may be made without departing from the principles involved, and I therefore desire it expressly understood that all such changes, modifications or alterations are fully contemplated as coming within the scope of the appended claims.

What I claim:—

1. A surgical instrument comprising a rod, a pointed hook at one end thereof formed by giving the rod a reverse bend so that the point projects rearwardly, a lateral finger-grip at the rear end of the said rod, a tube telescopic on said rod and provided with a longitudinal slot extending from end to end through which the finger grip projects to maintain the relative position of the hook and permit the ready removal of the rod longitudinally from the tube, outwardly and downwardly extending prongs at the end of the tube adjacent the hook, said prongs being spaced transversely of the instrument to permit the hook to pass between the same, and a handle at the opposite end of said tube adjacent the finger-grip, whereby the movement of the grip and handle towards each other will cause the hook and prongs to approach each other and grip an object between them.

2. A surgical instrument comprising a rod, a downwardly extended pointed member at one end of said rod, a lateral finger-grip at the rear end of said rod, a tube telescopic on said rod and longitudinally slotted to guide said finger-grip and permit the ready removal of the rod from the tube, a handle on the rear end of said tube adjacent said finger-grip, and downwardly extending spaced prongs at the outer end of said tube between which prongs the pointed member of the rod is adapted to be moved, whereby a relative movement of the grip and handle will cause the pointed member and prongs to approach each other to grip an object between them.

3. A surgical instrument comprising a rod, a rearwardly extended hook at one end of said rod, a finger grip at the opposite end of said rod, a tube telescopic on said rod and having a longitudinal slot from end to end through which said grip projects, a handle at the end of the tube adjacent the grip and prongs upon the sides of said slot and spaced transversely of the tube, whereby a relative movement of the hook and prongs towards each other causes the former to engage an object in a longitudinal plane intermediate the spaced longitudinal planes of the respective prongs.

Signed at Winnebago, in the county of Faribault, and State of Minnesota, this 19th day of November, 1924.

FREDERICK MOENCH.