

# Surgical Instrument



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# Surgical Instrument Classification

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- **Cutting instruments:** scalpel, scissors, rongeurs, and periosteal elevator
- **Bone instruments:** chisels, osteotomes, gouges, saws, bone-cutting forceps, curettes, and trephines
- **Grasping instruments :** including needle holder, crushing and non crushing tissue forceps, hemostatic forceps, thumb forceps, towel clamps, and bone-holding forceps;
- **Retractors :** hand-held and self-retaining
- **Suction tips**
- **Miscellaneous instruments**

# Cutting instruments



∞ **Scalpel** contain two part

1. **Handle** No.3 or No4

2. **Blade**

➤ No.3 = 10-15

➤ No.4= 20-25

❖ Used for cutting tissue.



**Figure 13-3** The four blades that fit a #3 scalpel handle (i.e., 10, 11, 12, and 15) and four blades that fit a #4 scalpel handle (i.e., 20, 21, 22, and 23). (Courtesy Miltex, Inc., York, PA.)

# scissors



- Scissors classified:
- Point type (sharp-sharp, sharp-blunt, and blunt-blunt)
- Blade shape (straight and curved)
- Cutting edge type (plain and serrated)

# Tissue or dissecting scissors



Mayo Scissors



Metzenbaum Scissors

# General purpose scissors used for cutting tissue & material



BLUNT/BLUNT



SHARP/BLUNT



SHARP/SHARP

# Bandage scissors

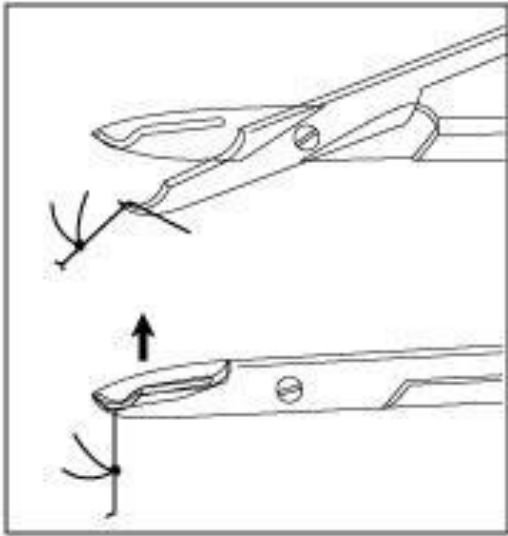
Used for cutting bandage

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# Suture scissor

Used to removal suture material





# Bone instrument



## ∞ Bone catcher

❖ Used to catch the bone .



17. Small Reduction with Point Forceps



16. Small Reduction Forceps



14. Small Self-centering Forceps

# Bone cutter



☞ Used to cut bones



# Bone drill

Used to penetrate bones.



Manual



Electric



# Bone plate and screw

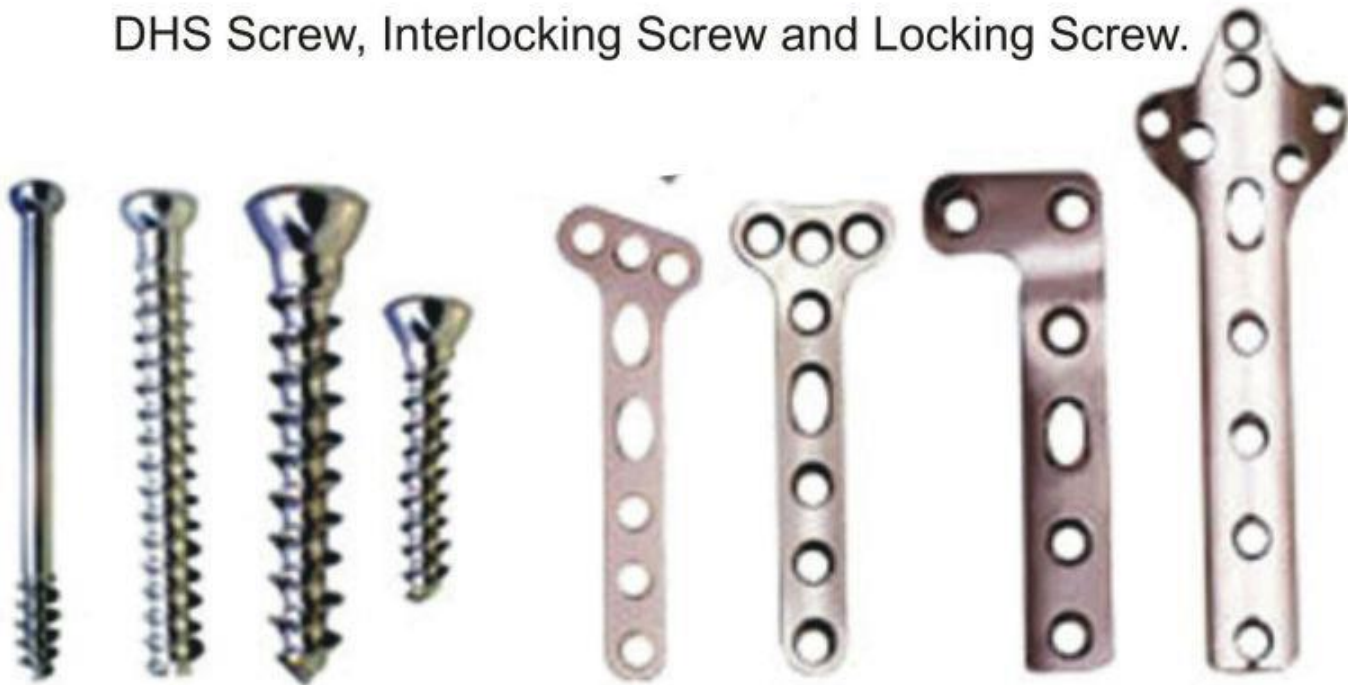
Used: fixed the fracture .



DCP Locking Plates, Cloverleaf Plate and Reconstruction Plate.

Bone Screw, Cortical Screw, Cancellous Screw, Malleolar Screw

DHS Screw, Interlocking Screw and Locking Screw.



# Intra-medullary pin

Used : to fixed fracture .



# Retractors



☞ Hand-held and self-retaining

❖ Used to expose surgical site.

# Hand-Held Retractors



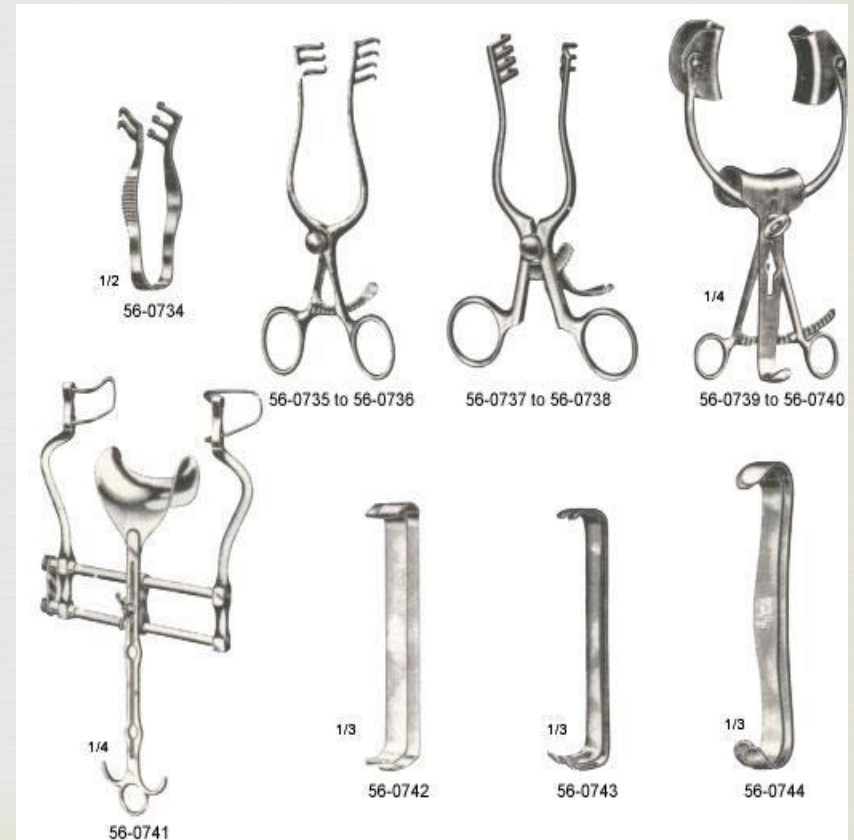
Rake retractor



Dever retractor



Different Retractor

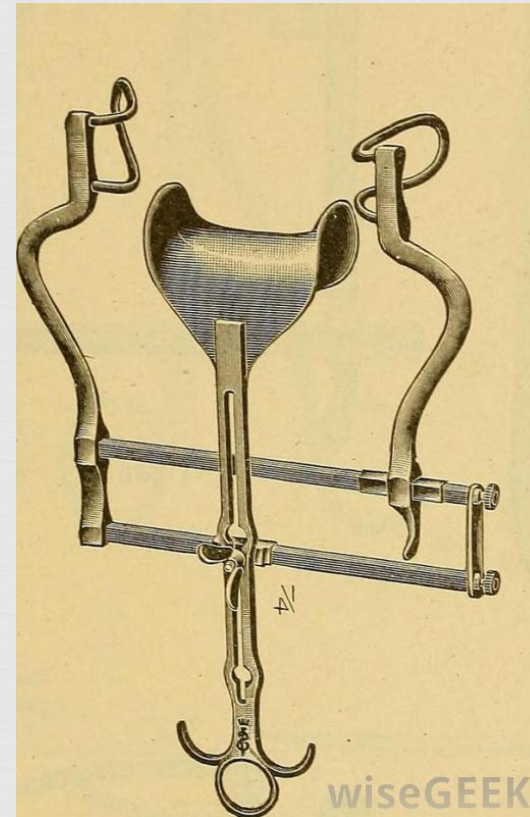


# Self Retractors

## Balfour retractor:

used in abdominal surgery .

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# Finochietto retractor used : in thoracic surgery.



# Grasping instruments



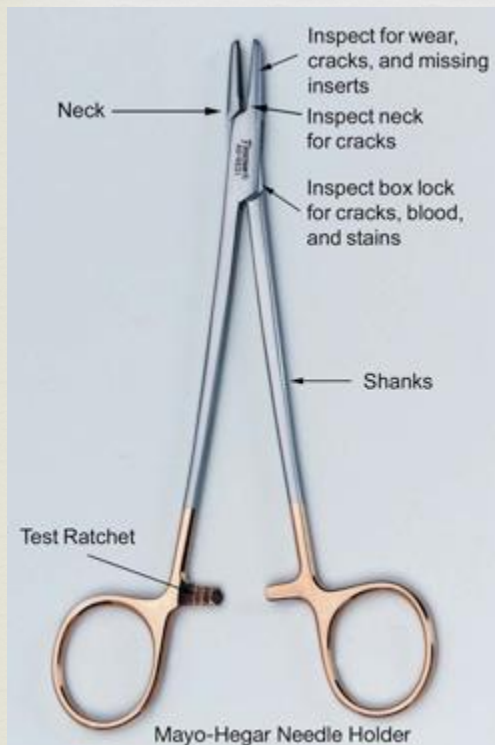
## Needle holder

- ❖ Simple N.H.
- ❖ Compound N.H
- ❖ Spring N.H
- Used to catch needle during suturing

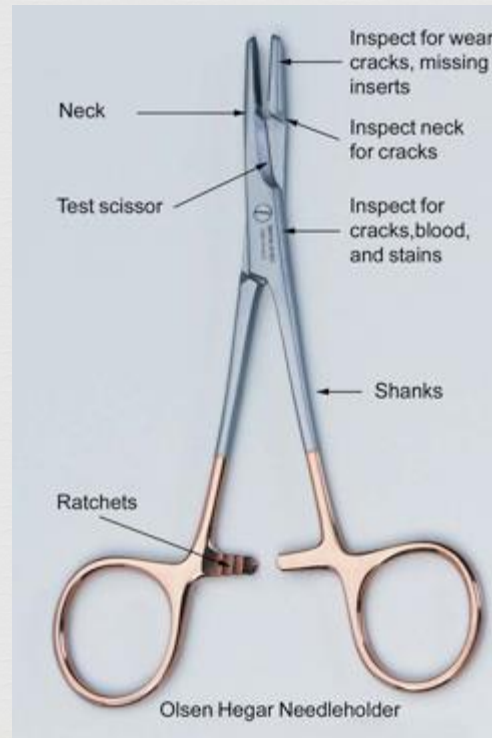
# Needle Holder



## Simple N.H



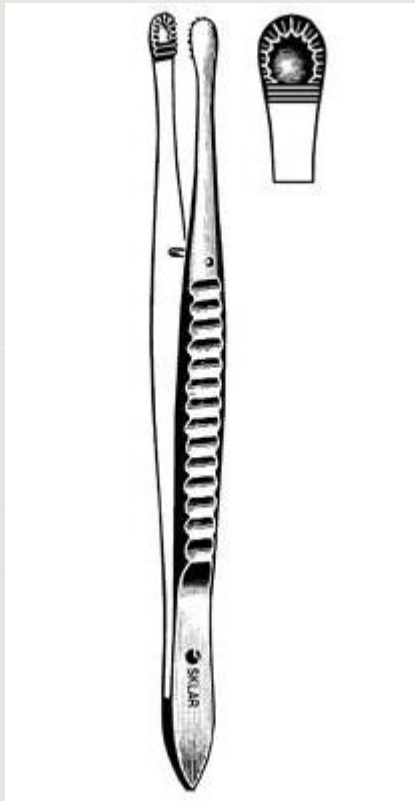
## Compound N.H.



## Spring N.H



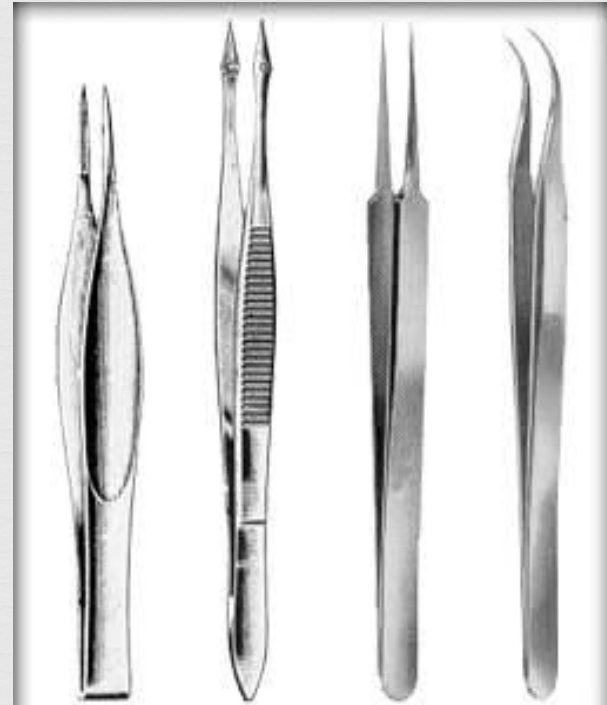
# Tissue thumb forceps used to hold tissue



# Dressing thumb forceps used to hold dressing and materials



# Splinter thumb forceps used to remove the splint



# Babcock grasping forceps used to hold bowel and bladder



# Allis grasping forceps

used to hold heavy fibrous tissue



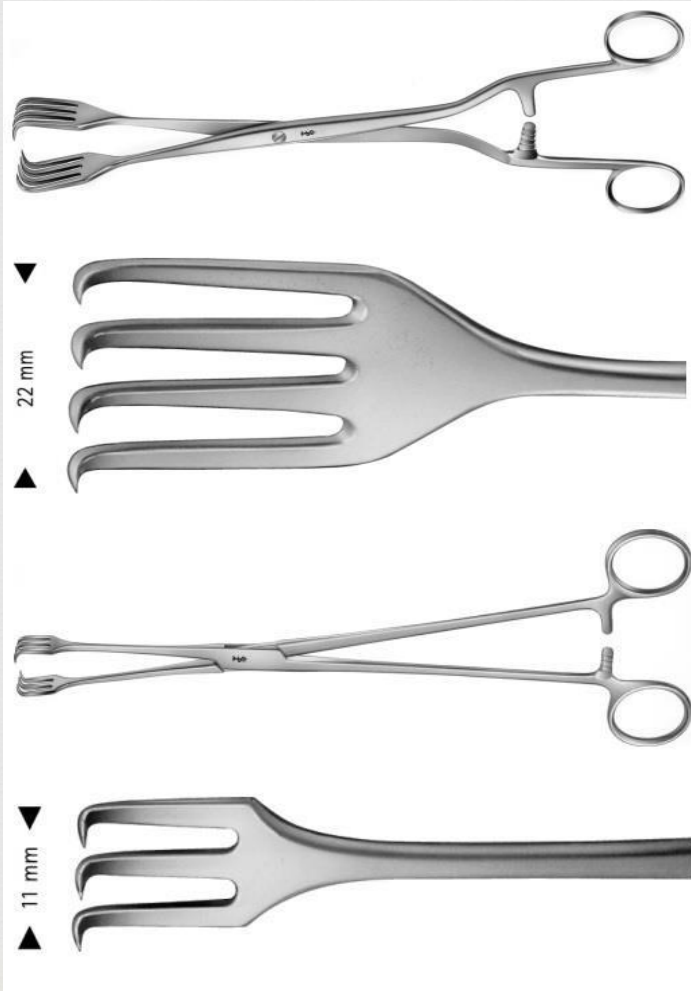


# Kocher grasping forceps

To hold heavy, tough tissues

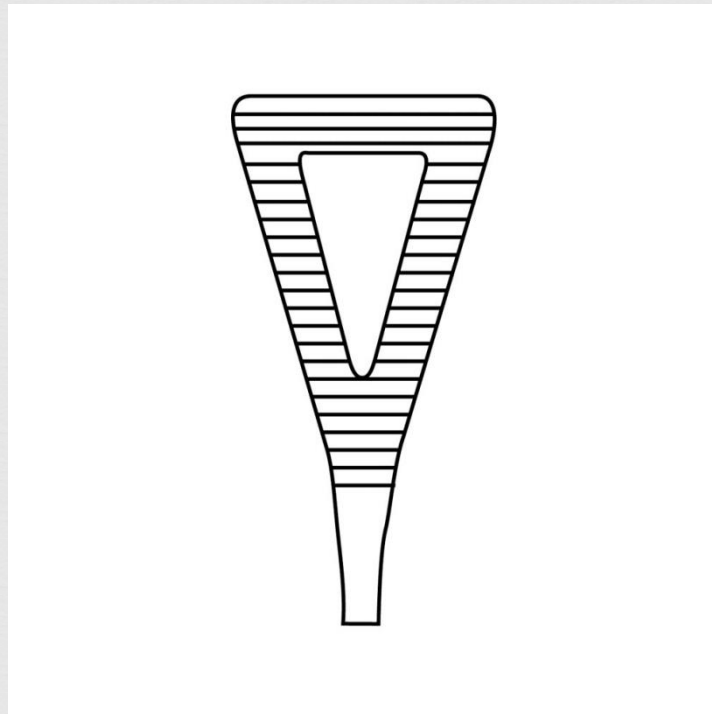


# Thyroid tenculum (Lahey thy.for.) used to hold thyroid gland



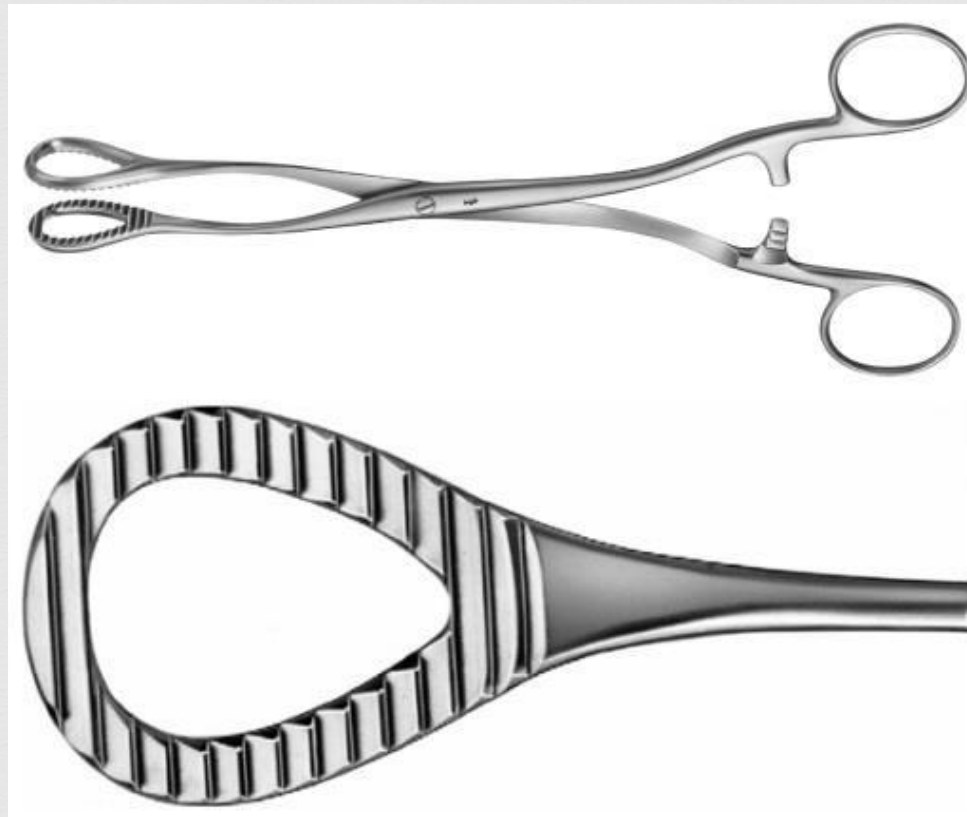
# Hemorrhoidal or lung clamp

To hold hemorrhoid and lung



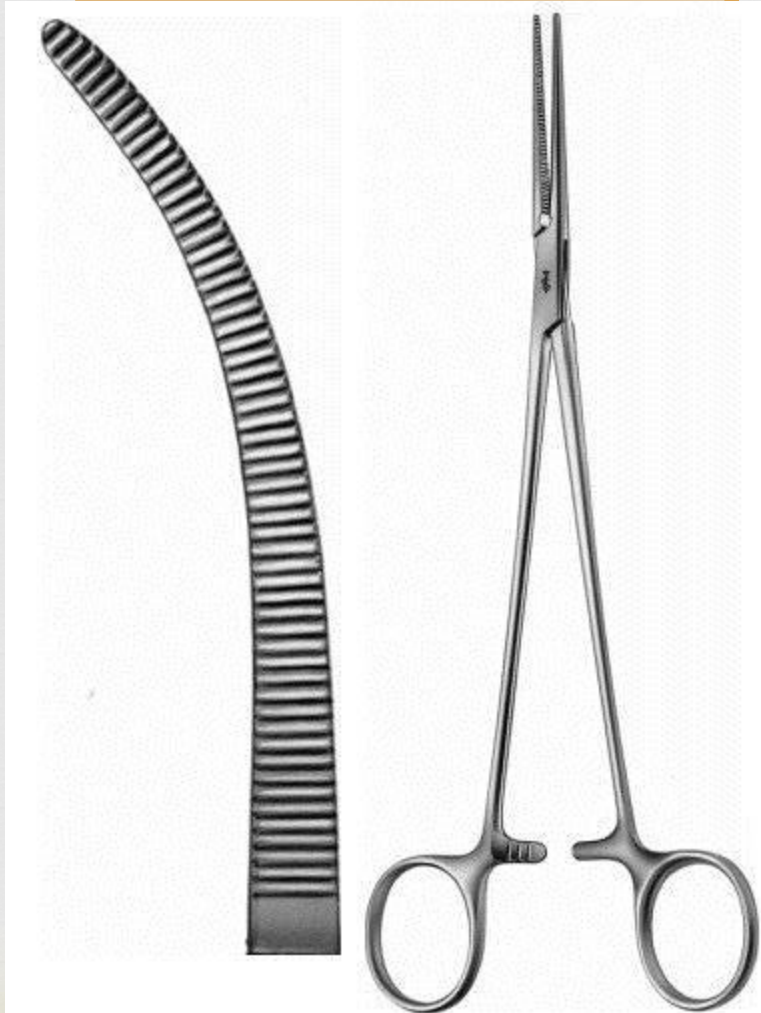
# Sponge holding forceps

To hold bandage or as retractor



# Artery or hemostatic forceps

Used to crush blood vessels



# Doyen Intestinal forceps

## Used to hold intestine



# Towel clip or towel holding forceps

To fixed the drapes



# Gastric grasping forceps

Used to grasp stomach





# Suction tips



## SUCTION

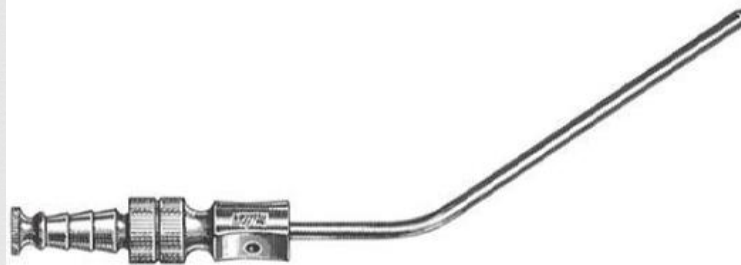
- **Suction** is used to remove blood and fluid from the surgical site. To reveal specific bleeding points for ligation or cautery.
- **Poole suction tips** have multiple openings and are best suited for use in body cavities.
- **Frazier suction tips** are often used during neurosurgical and selected soft tissue procedures (e.g., bulla osteotomy).
- **The Yankauer suction tip** may also be used

# Type of suction tips

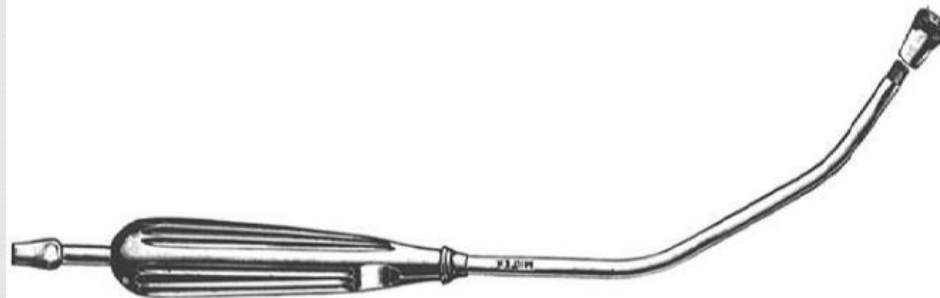


**Poole suction tips**

**Frazier**



**Yankauer**



# Miscellaneous instrument



- ∞ Ruminal set
- ∞ Ruminal magnetic
- ∞ Trocar and cannula
- ∞ Groove director
- ∞ Ear clamp
- ∞ Kidney Shape
- ∞ Surgical dram
- ∞ Surgical trolley

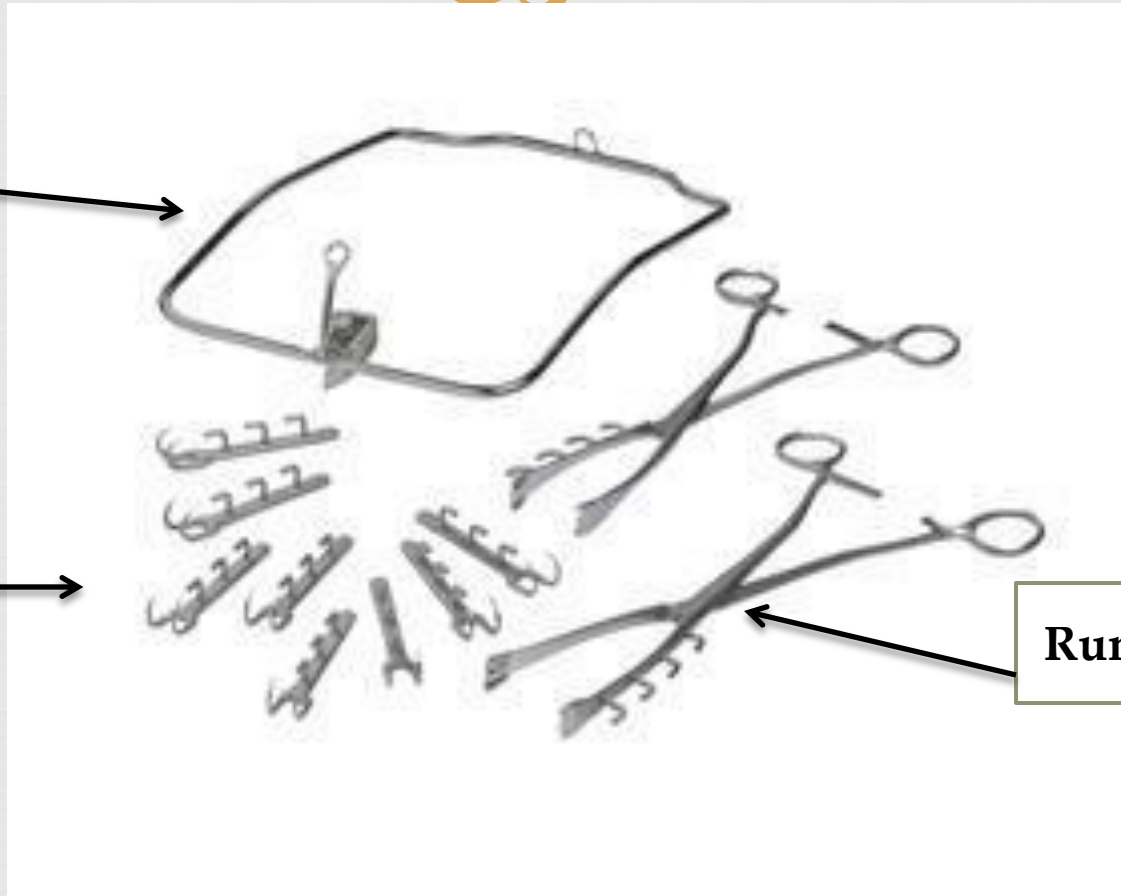
# Ruminal (weingart) set used in rumenotomy .



Ruminal Ring

Ruminal Hock

Ruminal Forceps



# Ruminal magnetic

Used to catch the metallic material



# Trocar and cannula

Used: To emergency relief of free gas bloat



# Groove director

Use as guide to incision and suture



# Ear clamp

used to limit the line of incision of ear trimming





# Kidney shape



# Surgical dram

To save sterile instrument



# Surgical trolley

surgical instrument on it .





**Thanks to Listen**